Lectures
ON
FIBROID DEGENERATION AND ALLIED LESIONS OF THE HEART, AND THEIR ASSOCIATION WITH DISEASE OF THE CORONARY ARTERIES.

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LECTURE I.
INTRODUCTORY.

THE condition of the heart wall, the consideration of which is to form the main object of the following remarks (viz., a development of what appears to the naked eye to be fibrous tissue in the midst of the muscle substance), is one which most English authorities would probably class under the term "chronic interstitial myocarditis," but which is frequently, though not invariably, to be referred to a cause quite different from that indicated by this term, implying as it does inflammatory action of a chronic kind. This fibrous transformation[1] is most frequently met with in the left ventricle, may not be at all apparent either on the external or internal surface of the cardiac wall, and generally, though not invariably, occurs in association with widespread degenerative changes of the arterial system, obviously involving in most instances the coronary arteries of the heart. Besides the change just referred to, a more acute process of the nature of softening is also frequently met with in association with the same degenerative arterial changes or with embolism; and although the appearances of this acute condition are very different from those of fibrous change, yet the operating cause is so obviously similar that the two must frequently be regarded as different stages of the same affection, or as differing from one another only in degree. The details of the cardiac lesions thus briefly referred to, and of fatty degeneration as associated with arterial disease, will be described in due course, but in the meantime it will be necessary to give some account of our previous knowledge of fibroid disease of the heart.

HISTORICAL AND CRITICAL ACCOUNT.

The conditions of the heart wall (especially fibrous transformation[1]), which form the subject of these lectures, have long been described by special observers, but it is only of recent years that what appears to be, in most instances, their true pathological significance has been hinted at, and that much more on the part of continental than of English physicians. From the time of Morgagni downwards frequent references are to be found in medical literature to a fibrous condition of the heart-wall, apart from the lesions met with in connexion with the valvular apparatus. It is to be noted, however, that in many of the earlier writings reference is made to those conditions only where the fibrous change had advanced so far as to be visible on the surface, without requiring any special dissection of the muscular tissue for its exhibition. Thus Morgagni,[2] in his twenty-seventh letter, which treats of "Sudden Death from a Disorder of the Heart," article 17, after giving illustrations of calcareous plates in the substance of the heart, writes as follows: "For it is certain that the fleshy fibres of the heart themselves sometimes degenerate into a tendinous hardness. Albertini, therefore, saw in some bodies 'that the substance of the heart from the basis to more than half its extent had become tendinous, as it were, both in consistence and colour; which kind of metamorphosis I have it in my power to confirm, if there were any occasion, by an observation of my own.'" It will thus be seen that the condition has been recognised from the earliest days of pathological anatomy, and it is interesting in the light of modern research to observe that the term "degenerate" is used in the description of the change. It is not to be supposed, however, that the term necessarily meant the same to Morgagni that it does to us.

Towards the end of the last and the beginning of the present century medical literature abounds in communications on the subject of aneurysm of the heart, a condition which is very apt to follow upon the morbid condition at present under review. These records are therefore of great interest in the present investigation, and a few of the more important may be shortly referred to. Dr. Matthew Baillie[3] in his work on Morbid Anatomy describes a case of aneurysm of the left ventricle, and refers to the rarity of the condition. He explained the occurrence of the aneurysm by the muscular tissue at the apex being thin and weak, and so unable to resist the impulse of the blood against it. In 1817 Portal[4] published a long article on the subject of cardiac aneurysm, mainly from an etiological point of view. Among the different causes which he states as giving rise to aneurysms of the heart, the following may be mentioned: (1) the formation of false membranes inside and outside of the heart; (2) engorgement of the coronary arteries and veins; and (3) serous and purulent infiltrations. In the second of these it would seem as if we had a hint of the relationship which exists between a diseased condition of the coronary arteries and the development of cardiac aneurysm, but, so far as I can gather, the author simply refers to a dilatation of these vessels as one origin of aneurysm, and not to any nutritive change in the muscular tissue. About the same time important observations were published in France by Breschet[5] and Reynaud.[6]

Another very important paper in connexion with this subject from an historical point of view is that of Mr. John Thurnam on Aneurysm of the Heart.[7] Although, like the others just referred to, not directly bearing on the subject of fibrous transformation of the heart, the essay is very important from the fact that many of the cases were found to be associated with what is called "fibrous degeneration" of the heart-wall. With regard to the causation of the "fibrous degeneration" itself, the views adopted are pericardial adhesions and rheumatic inflammations. But nowhere is there found any allusion to the state of the coronary arteries as an etiological factor, nor are there any references to fibrous change as a morbid state of the heart-wall *sui generis*, and apart from aneurysm. Although in several of the cases the coronary arteries are mentioned as ossified, no opinion is expressed as to the probable relationship of this to the aneurysmal state. Interesting statistics are also given by Thurnam as to the situation of the aneurysm. Out of 74 cases, 58 were situated in some part of the left ventricle; and "the 67 aneurysms which occurred in the 58 cases, omitting one case in which this is not mentioned, may as regards situation be thus distributed: at or near the apex of the ventricle, 27; in different parts of the base, 21; in intermediate portions of the lateral walls, 15; in the interventricular septum, 3. ..... To conclude these observations on the situation of the aneurysms of the left ventricle, the only general conclusion that we can come to appears to be that the thinnest parts of its walls, or the apex and highest part of the base, are those which are much more frequently than any others the seat of the disease." This in general agrees with the observations of more recent writers and also with my own. It will thus be seen that in the record of Thurnam's cases we have a most important contribution to the literature of this subject from a pathological as well as from a historical point of view. In 9 cases the muscular tissue was the seat of more or less extensive "fibro-cellular degeneration," caused by inflammation it was supposed. If the disease was present to such an extent as to cause aneurysm in so many of the cases, we have strong reason for supposing that in its slighter manifestations, which are easily overlooked, it may occur much more frequently. The fibro-cellular degeneration, however,

[1] I use the terms "fibroid degeneration" and "fibrous transformation" as synonymous, and I think the latter is more scientifically correct. It is a real transformation into fibrous tissue with which we have to deal, so that the term "fibroid" seems rather cumbrous.

[2] The Seats and Causes of Diseases investigated by Anatomy, in Five Books. Translated from John Baptist Morgagni, by B. Alexander, M.D. Vol. i., p. 845. London: A. Millar, 1769.

[3] Morbid Anatomy, by M. Baillie, M.D., London, 1793, p. 17.; see also his Plates (1799), Plate iii., Fig. 1.

[4] Sur les Aneurysmes du Cœur.

[5] Recherches et Observations sur l'Aneurysme faux consécutif du Cœur. Répertoire d'Anatomie et de Physiologie Pathologique, 1827, vol. iii.

[6] Reynaud, Journ. Hebd. de Médecine, 1829, vol. ii., p. 363.

[7] Medico-Chirurgical Transactions, 1838, vol. xxi. p. 187.

does not seem to have been regarded by Thurnam himself or by others as an independent morbid state; and one of the objects which I have at present in view is an attempt to establish that in fibrous transformation of the heart wall we have a diseased condition which has as much right, from a clinical as well as from a pathological point of view, to be considered an independent affection of the heart as fatty degeneration, or even as certain valvular lesions.

Another reference in regard to this subject, important from an historical point of view, may be found in the work of Dr. Ramadge on the Heart.[8] In the chapter on Carditis he refers to a condition called "induration of the heart," said to be one of the results of inflammation attacking the muscular or intermuscular cellular tissue. "Sometimes," he adds, "the consistence of the organ is fibrous or tendinous; sometimes cartilaginous." Similar brief references to the condition may be found in most other text-books on heart disease, up till the present time.

Coming now to more recent times, it is found that this condition of the heart-wall has been abundantly observed and described by English physicians and pathologists, although, so far as I can find, the relationship of the change to obstructed coronary circulation has been almost entirely overlooked, and, as a general rule, it has been attributed to chronic myocarditis, probably not without truth, in a certain number of cases. In 1872 the attention of the profession in England was strongly directed to this subject by the Lumleian Lectures of Dr. Richard Quain on the Diseases of the Muscular Walls of the Heart.[9] Under the name "connective tissue hypertrophy," Dr. Quain enters into a full consideration of this affection of the myocardium. No one can read these lectures without seeing that the author was very strongly of opinion that the morbid state originated in an inflammatory action. "The origin," says he, "of the disease is unquestionably to be sought for in a chronic interstitial inflammation or hyperplasia." But he does not seem to recognise any influence on the part of the coronary arteries in bringing about fibrous transformation, although, in describing fatty heart, he points out that "there are no communications between the two coronary arteries; and hence in obstruction of one no collateral circulation can be set up." The strength with which the inflammatory theory is inculcated is further seen in the remarks on treatment: "In connective tissue hypertrophy, if we could diagnose it in its early stage, remedies likely to subdue the inflammatory state in which it takes its origin might have a beneficial influence." Here and there, too, statements which seem to contradict one another are met with, as if, on the whole, the true significance of the condition were not perfectly clear to the mind of the lecturer. Thus: "In connective-tissue hypertrophy the freedom of contraction of the fibres is restrained by the surrounding new tissue, and such a heart is dynamically weak. It would seem, so far as present observation goes, less likely to dilate than the simply degenerated heart"; whereas in the section on aneurysm of the heart he speaks of "the production of a fibroid cirrhotic state which yields to the internal pressure."

During the twenty years which preceded the delivery of Quain's Lumleian Lectures numerous cases of this transformation of the heart wall had been recorded in the current medical literature, to a few of which I may refer in some detail, in order to give some indication of the predominating opinion in the profession concerning the lesion. In 1854 Dr. W. T. Gairdner[10] reported a case of ossification of the coronary arteries, with tendinous degeneration of the heart; and I may add that this is one of the few records that I have been able to consult in which any mention is made of the coronary arteries. In the great majority of cases recorded the state of the coronary arteries is not mentioned, and therefore one is justified in coming to the conclusion that they had not been specially examined. In the Transactions of the Pathological Society of London is contained a rich collection of cases, a full reference to all of which is to be found in Dr. Hilton Fagge's communication, to be immediately referred to. Dr. Bristowe,[11] in recording a case of what is undoubtedly fibrous transformation, states that the cause in all probability was pericardial adhesion, and explains the production of the fibrous material by supposing that a deposit of lymph capable of organisation had been deposited between the fibres, the condition being thus comparable to a cirrhosis. No mention is made of the state of the coronary arteries. Again, Dr. T. Henry Green[12] records a case of sudden death, in which a patchy deposit of fibroid tissue was found in the left ventricle. The aorta and cerebral arteries were atheromatous, but the state of the coronary arteries is not described. The view expressed by Green in his pathology as to the mode of production is that it is secondary to an inflammatory process, commencing either in the peri- or endo-cardium. Interesting cases, from our present point of view, are also recorded by Bence Jones, J. W. Ogle, Whipham, Payne, Wilks, and Moxon.[13] Some of these cases, however, described by the contributors as fibrinous masses in the heart wall, I would regard as examples of the acute process—i.e., of infarction of the heart, which, as I have already indicated, is closely related from an etiological point of view to fibrous change. Moxon, however, in recording a case,[14] regards the fibrinous mass in the heart-wall as coagulated blood, which had been effused into a partial rupture, and he distinctly recognises the state of the diseased coronary artery as a cause of the rupture. With the exception of Dr. Moxon's case, the state of the coronary arteries is not described in those referred to above; and, although the relationship between diseased arteries and localised patches of extreme "fatty" change (as it was considered) in the myocardium had been made abundantly clear by Quain and others, it does not seem (judging from the records) to have struck many of the observers that there was any necessary connexion between arterial disease and the morbid state at present under review.

Without doubt one of the most important monographs on this subject is that of the late Dr. Hilton Fagge on Fibroid Degeneration of the Heart,[15] which may be said to contain the sum of British experience of, and teaching on, this subject up till the year of its publication—1874. The paper contains the results of much labour and thought, and in many places is to be regarded as a forecast of still more modern views on the subject; but a most striking feature is that in the midst of the most cogent reasoning on the pathology of the condition, not a word should have been said as to the etiological significance of obstructed coronary circulation. The first part of the paper gives the record in a very perfect way of eleven cases of the affection, whilst in the latter part the author states his opinions of the pathology of the condition, a few of which may be briefly referred to in order to give an idea of their wide scope. "For it is to be observed," says he, at page 89, "that this affection never attacks the whole heart at once, nor even the whole of a single chamber. It is always more or less localised, and sometimes invades only a very small tract." Such a statement seems to me to be a very strong argument in favour of the circulatory theory of its origin. At page 90 he says, "In the early stage, however, it sometimes seems that a retrograde change in the muscular fibres of the heart advances more rapidly than the growth of the fibrous tissue that should accompany it"; and he goes on to show how a softening, not unlike a pyæmic abscess in appearance, may be produced in some cases. It is very strange that he should have argued in this way, and yet not have suggested any connexion between obstruction of the coronary arteries and the lesion in question. We must, however, regard these statements of Dr. Hilton Fagge as forecasts of the still more modern views and observations of Weigert and Huber on this subject. He goes on to speak of the frequency with which aneurysm is due to this affection, and to point out how rupture of the heart, so frequent in local fatty degeneration of the muscular fibre, very rarely occurs in this condition. I think, however, that this statement must be received with some hesitancy, for, as I pointed out about two years ago in a paper on Rupture of the Heart, there is good reason for believing that many cases are not due to localised fatty change at all, but to infarction. "With regard to the *causes* of fibroid disease of the heart," says he, "we seem to be at present completely in the dark." He discusses in detail the influence of pericarditis, syphilis, &c., and points out that fibroid change of the heart-wall may be a cause of sudden death.

As I have already indicated, the relationship existing between diseased coronary arteries and localised extreme fatty degeneration (leading to rupture in some cases) had

[8] Asthma, and on Diseases of the Heart, by F. H. Ramadge, M.D. Second Edition. London: Longmans, Brown, Green, and Longmans. 1847. Page 339. [9] THE LANCET, vol. i. 1873, pp. 391, 426, 459.
[10] Monthly Journal of Medical Science, Edinburgh and London, 1854, vol. xix., p. 79. [11] Pathological Transactions, vol. vi., p. 148.
[12] Ibid., vol. xxv., p. 47.
[13] Ibid., vol. iii., p. 281; vol. vii., p. 107; vol. viii., pp. 116, 113, and 139; vol. xv., p. 87; vol. xxi., pp. 103 and 115; vol. xvii., p. 70.
[14] Ibid., vol. xvii., p. 70. [15] Ibid., 1874, vol. xxv., p. 64.

been insisted on by Quain and others many years ago; but to show that the possibility of disturbed coronary circulation setting up other morbid states of the cardiac wall (more nearly allied if one may judge from the descriptions given to the conditions forming the subject matter of the present remarks) was an idea which occurred to one of the greatest living masters of our art in the earlier years of his work, I may here briefly refer to Sir William Jenner's paper on Congestion of the Heart.[16] In this communication, which was made to the Royal Medical and Chirurgical Society of London, he writes: "The principal object of this paper is to call the attention of the Fellows of the Society to the occurrence of congestion of the muscular tissue of the heart; to the most common and direct consequences of that congestion—viz., induration, toughening, and thickening of the walls of the heart; and to the influence which those changes of texture exercise as predisposing causes on the development of permanent dilatation of the heart." The chief interest and importance of this paper are clinical, for it seemed to me, in reading it, that the pathological details were somewhat vague and indefinite, and my main object for referring to it at this point is to show, on the authority of a great clinical observer, the necessity of considering the condition of the coronary circulation in all affections of the heart.

In 1881 a most important paper on Fibroid Degeneration of the Heart was read by Dr. Charlewood Turner at the London meeting of the International Medical Congress.[17] In this paper he gives a minute description of the appearances, naked eye and microscopic, of three cases which he had the opportunity of carefully studying. In this article the influence of obstructed coronary circulation as an etiological factor in the production of fibrous transformation is, so far as I have been able to examine, for the first time categorically mentioned in English medical literature. "Other facts," he says, "suggest the possibility of the origination of localised fibroid degeneration as a result of arterial obstruction, or of venous thrombosis from injury to the vessel from overstraining the walls of the ventricle." And he further shows how some of Dr. Hilton Fagge's cases point to the same thing. From all points of view Dr. Turner's article must be regarded as a most valuable and original contribution to the literature of the subject. In the latter portion of his observations he deals with the generalised form of fibroid degeneration which is met with in dilated hearts, and which may contribute to cardiac failure, but which is a subject beyond the scope of my present investigation.

Having so far dealt, in as complete a manner as has been possible for me, with the work of the more recent English observers, it now becomes necessary that I should give some short account of the foreign literature of this subject which I have been able to consult. In the writings of two German observers—viz., Professor Weigert[18] and Dr. Carl Huber,[19] I have met, for the first time, with what appears to me to be an accurate and tenable explanation of the relationship existing between obstruction of the coronary arteries and the formation of fibrous patches in the walls of the heart, and I do not think I can do better than give a brief abstract of the views expressed by these gentlemen. My friend Professor Weigert, in his observations on the infarction of the heart, has shown that, where the circulation is slowly interfered with by sclerosis of the arteries, atrophy, with destruction of the muscular fibres, takes place without injury to the connective tissue. The shrunken fibres are thus set off by the stringy connective tissue, and this process, he considers, really constitutes the so-called chronic myocarditis. In such cases he has good ground for believing that the vascular change caused the destruction of the muscular fibres as a primary factor. If, however, the arrest of the circulation is more sudden in its onset, then yellow dry masses similar to coagulated fibrine make their appearance. Often the tissue appears quite normal (sometimes the transverse markings being quite apparent), but the muscular fibres and the connective tissue show no nuclei—a necrosis has occurred. Around these masses, as a reactionary phenomenon, abundant round and spindle cells are found.

Weigert's observations, which I have just noticed, appeared in the course of a long paper on the general subject of the Occurrence of Coagulation in the Tissues, and were followed by those of Huber in 1882. In Huber's paper the whole question of the so-called chronic myocarditis is discussed in a broadly scientific spirit, and his facts and conclusions are so convincing that it is difficult, after a careful perusal of the article, to arrive at any other opinion than that the condition of the coronary arteries must be regarded as one of the most important etiological elements in the production of the morbid changes at present under consideration. He bases his opinions on eighteen cases given in the paper, and a number of others which he thought it unnecessary to record, in all of which the fibrous changes associated with distinct vascular disease were well marked; and, in addition, he gives brief details of four or five others, in which the acute affection or infarction of the heart wall was distinctly present. He describes the lesion as the occurrence in the heart-wall of lines or streaks of firm, tendinous, glancing tissue running parallel to the muscular fibres, and somewhat depressed beneath the level of the cut surface of the surrounding muscle. It is mostly observed in the median layers of the cardiac parietes, and is often not to be seen beneath the endocardium or pericardium. This is precisely the condition that I have observed in my own cases. He further remarks that the process, as it presents itself anatomically, is what is most commonly regarded as chronic myocarditis, and that until quite recently syphilis, rheumatism, or inflammation spreading either from the endo- or peri-cardium was regarded as its cause. He then proceeds to show by very cogent reasoning, as it appears to me, that in a very large proportion of cases indeed the lesion must be looked upon as primarily a vascular one. It therefore becomes at once evident that, from a strictly scientific point of view, the terms "chronic myocarditis," "indurative interstitial myocarditis," &c., are, as has been mentioned at the outset, in a large majority of cases misleading.

Since the foregoing remarks were originally penned, the splendid work on Medicine by Dr. Hilton Fagge has appeared, and one cannot help referring to the universal feeling of sorrow experienced by the entire profession when the gifted author was so suddenly called away before seeing the end of his labours. In the article on Fibroid Disease of the Heart,[20] it will be found that Dr. Fagge had fully appreciated the value of Weigert and Huber's researches, and saw in them an explanation of many of his own carefully recorded cases. He refers to myocarditis, syphilis, and thrombi as causes, but obviously places most importance on the relationship existing between fibroid change and disease of the coronary arteries; and, referring to two of his own cases of infarction of the heart, he writes the following sentence: "Thinking over these two cases, I have long seen clearly that the peculiar change in the muscular tissue must be the primary affection, and that the fibroid development must be secondary." He then proceeds to speak of the light thrown upon the condition by the researches of Weigert and Huber.

Ziegler[21] has also very fully described acute necrosis of the heart-wall under the name of "myomylacea cordis," and has clearly related this change to obstructed coronary circulation; and the connexion is also insisted upon by Birch-Hirschfeld[22] in his large work on Pathological Anatomy.

The subject of interstitial myocarditis has also excited considerable attention on the part of French physicians, and in 1880 an account of a case was published by M. Déjérine.[23] In looking through his paper, I find that the case was one of anæmia complicated by aphasia &c. At the post-mortem, the heart was found to be the seat of interstitial myocarditis, which was also stated to be primitive. As the consequence of the myocarditis, which he supposes to have been due to the anæmia, clots were formed in the cavities of the heart, which explained the occurrence of the aphasia. Holding the opinions which I have already indicated as to the pathology of fibrous transformation of the heart wall, I would rather be inclined to regard the interstitial myocarditis as also the result of embolism, and the description of the morbid appearances is in some places distinctly suggestive of infarction.

[16] On Congestion of the Heart and its Local Consequences, by William Jenner, M.D. (Med. Chir. Trans.) London. vol. xliii., p. 199.

[17] Transactions of the International Medical Congress, Seventh Session, vol. i., p. 427. London: J. W. Kolckmann. 1881.

[18] Ueber die pathologischen Gerinnungsvorgänge. Von Prof. Dr. Carl Weigert (Leipzig). Virchow's Archiv (1880), Band lxxix., p. 106.

[19] Ueber den Einfluss der Kranzarterien-erkrankungen auf das Herz und die chronische Myocarditis. Von Dr. Karl Huber. Virchow's Archiv (1881), Band lxxxix., p. 236.

[20] The Principles and Practice of Medicine. By the late C. Hilton Fagge, M.D., F.R.C.P.. Vol. ii., p. 32. London: J. and A. Churchill. 1886.

[21] Lehrbuch der allgemeinen und speciellen pathologischen Anatomie. Vol. i., p. 408. Jena: Gustav Fischer. 1881.

[22] Lehrbuch der pathologischen Anatomie. Von Dr. F. V. Birch-Hirschfeld. Zweite Auflage, Zweiter Band, 1 Lieferung. Leipzig: F. C. W. Vogel. 1883. Page 86.

[23] Note sur un Cas de Myocardite Interstitielle Primitive. Le Progrès Médical, 1880, No. 39, p. 751.

Dr. Wickham Legg's Bradshawe Lecture on Cardiac Aneurysm[24] is a most valuable contribution to our medical literature, and one of very considerable importance as regards my present subject, because in discussing the etiology of "fibroid disease" he differs from the views of Huber and Cohnheim. He makes no mention of Weigert's paper on Coagulation Necrosis, in which the theory was first promulgated, and which was published the year before Cohnheim's on the Results of Obstructing the Coronary Arteries of the Heart. His first objection is as to the age of Huber's patients, and he mentions several young persons who had the disease, and in whom the coronary arteries were reported healthy. Now, in going over cases of this disease, I have been struck by the fact that in very many the state of the coronary arteries is not mentioned at all, and unless there be a specific statement, at least in the earlier recorded cases, I think we are justified in concluding they were not specially examined. His next objection is that in a case of Greenfield's the orifices of the arteries were obstructed without producing any result, except generalised molecular fatty change. Now, I am strongly of opinion that a distinction must be drawn between cases where the orifice is obstructed and cases where individual branches are occluded. In the former class of case, I think, resulting fatty degeneration is the rule. His next objection is as to the anastomosis of the cardiac coronary arteries, and this objection I will examine further on. As has been observed, the paper is a most valuable one, and the views of so careful an observer must be thoroughly taken into account, in order to arrive at any conclusion as to the true nature and cause of this interesting disease.

I have thus endeavoured to give some account of the history of our knowledge of fibrous transformation of the heart. In addition to the articles noticed above, several important papers, some of them of great clinical interest, have recently appeared, but space forbids me to do more than simply mention them. Thus we are indebted to O. Rosenbach,[25] E. Leyden,[26] Albert Robin,[27] C. Paul,[28] and others.

In Dr. Byrom Bramwell's large recently published work on Diseases of the Heart, the subject of fibroid degeneration is included in the chapter on chronic myocarditis, "which," he says, "for practical purposes may be considered as synonymous with fibroid degeneration." In the long account of the etiology and pathology of the condition, not a hint is given of the possible direct connexion which this lesion may have with disease of the coronary arteries or obstruction of these vessels. The author points out, however, that long-continued venous engorgement of the heart-wall may have an influence in its production, and this statement is of importance in connexion with Sir William Jenner's paper, to which I have already referred. The absence of any reference to the causal influence of the coronary arteries in so large and valuable a work shows that the true etiology of a large section of such cases has not as yet been fully comprehended. I do not wish to assert that an abnormal condition of the coronary circulation is the cause of all fibroid conditions of the heart. Far from it; but so far as my experience and that of many others go, it is directly responsible for a very large number, in which anything of the nature of an inflammatory course of events cannot come into court. It is also further obvious that to many cases the term "chronic interstitial myocarditis" cannot logically or scientifically be applied. I am decidedly of opinion that the influence of the coronary arteries in producing many of the well-known lesions of the myocardium has not been sufficiently recognised, and if the publication of the present lectures has the effect of directing greater attention to these vessels among English physicians and pathologists my purpose will have been amply fulfilled. In Dr. Bramwell's article on "Aneurysm of the Heart" its association with fibroid change is fully recognised; and in the account of the author's case of rupture of the heart it is pointed out that the branch going to the ruptured area was obstructed. It is therefore somewhat strange that the great importance of the coronary arteries in all affections of the myocardium should not have been more clearly stated and strongly insisted upon.

[24] Some account of Cardiac Aneurysms. Being the Bradshawe Lecture, read Aug. 18th, 1883, by Wickham Legg. London: J. and A. Churchill. 1884.

[25] Centralblatt für die medicinischen Wissenschaften, 1886, No. 38, p. 673. [26] Ibid., 1884, p. 651.

[27] Sur les Ruptures du Cœur. Gaz. Hebdom. de Méd. et de Chirurg., Dec. 18th, 1885, No. 51, p. 829.

[28] Aneurysme du Cœur. Gaz. Hébdom. de Méd. et de Chirurg., March 6th, 1886, No. 10, p. 165.

A CASE OF TYPHLITIS.

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THE following case of acute inflammation of the vermiform appendix, succeeded by perforation, general peritonitis, and death, seems not unworthy of being placed on record.

Percival T——, aged twenty, a clerk, was first seen on Saturday, Oct. 22nd, at 6 P.M., and found on his back in bed with legs drawn up, face expressive of anxiety and suffering, and complaining of pain and tenderness in his abdomen and inability to pass urine; the pain was obviously of a rhythmical or griping character, and during the paroxysms the face was distorted and the hands pressed to the sides of the abdomen.

The history obtained was as follows: He was an accomplished athlete, but had not attended the gymnasium for some months, till on the evening of Oct. 19th he indulged in a prolonged course of gymnastic exercise, and recalls distinctly a fall on his abdomen across the parallel bars, which was followed by a feeling of sickness and giddiness. He felt a little stiff and sore about the abdominal muscles after his exertions, and as this feeling did not pass off, he took the next evening (20th) a couple of rhubarb pills, which produced a slight watery evacuation the following morning (21st), but did not relieve the pain. On this day the abdominal pain became gradually more intense, and was referred mainly to the hypogastrium; he felt cold and inclined to shiver, and had a frequent desire to micturate, but could not always succeed in passing any urine. There had been no sickness. Early in September he had sought advice on account of some indefinite pain in the right side, but from this he seems to have completely recovered. With this exception he has always enjoyed robust health. His father died at the age of fifty-six of (?) consumption. His mother is gouty and emphysematous.

On examination his abdomen was found to be uniformly, though slightly, distended and tympanitic, more or less tender all over, and especially painful over the hypogastrium. Tongue large, moist, flabby, and coated with a thick creamy fur. Pulse large and bounding. Skin moist. Has passed flatus freely and been somewhat troubled with flatulence. Has passed no urine for the previous twelve hours, but the bladder does not seem distended. Ordered poultices to abdomen, and small quantities of beef-tea, milk, and ice. To take fifteen minims of nepenthe every four hours. In the evening he passed a small quantity of high-coloured urine with difficulty, had some tenesmus, but only passed a small quantity of flocculent fluid.

October 23rd.—Restless last night; slept, but perspired very freely. Abdomen measures thirty-one inches round umbilicus; less tender; coils of intestine can be felt through the abdominal walls. Pulse weaker, but still full. Temperature 101·8°. Has been slightly sick after beef-tea. Much troubled with flatulence and tenesmus. Has micturated once only, but urine not obtainable for examination. Very thirsty. Profuse perspirations continued throughout the day.

24th.—Seen in consultation with Dr. Goodhart. In much the same condition as on previous day, but weaker. Pain is now chiefly referred to the left groin and flank. The abdomen is much distended and tense, although he has not now any of the pinched expression of peritonitis; nor is the abdomen markedly tender on palpation. The intestinal coils are visible, and we were inclined to think that peristalsis was palpable, but of this we were not quite sure. The urine is still passed with difficulty, and contains a trace of albumen. The rectum contains scybala. The heart and lung sounds are normal. Temperature 100°. Pulse 100, full, anything but peritonitic in its characters. He has not been sick for some hours. Tongue flabby, with thick creamy fur; sweating profuse and rather sour. Fifteen grains of salicylate of soda to be added to each dose of medicine. A small enema of warm water returned, bringing with it much flatus, and giving great relief; another given four hours subsequently brought away a few scybala.

25th.—Decidedly worse. Meteorism marked. Sickness very frequent and violent; vomit gradually becoming distinctly stercoraceous. Occasional slight hiccough. Tongue small

and dry. Same trouble with urine; catheter drew off only two ounces. Sweating ceased. Pulse small; temperature 99°. He was given a hypodermic injection of morphia (one-third of a grain) at 6 and 10 P.M., and nutrient enemata every third hour, at first with considerable benefit.

26th.—The vomiting and meteorism subsided, but symptoms of collapse, with cold extremities, jactitation, sighing respiration, &c. supervened, and death ensued at 6 P.M.

Examination of abdominal cavity, fourteen hours after death.—A few greatly distended coils of intestine, small and large, filled the abdomen. The whole of the peritoneum was dull and injected—the visceral portion in definite lines, the parietal more irregularly; omentum reduced to a mere shred; coils of intestines slightly adherent to one another through the medium of a glutinous stringy material. These appearances were but slightly marked in the upper portion of the cavity, but increased in intensity from above downwards. In the pelvic cavity the whole of the contained viscera was matted together by means of a layer of tough whitish-grey lymph the thickness of blotting paper. A little thin purulent material of (?) fæcal odour was contained in the pelvis. The appendix vermiformis was of a deep purple colour, in great contrast to the semi-transparent intestines, and slightly distended. About its middle there was a small circular opening with everted sloughing edges, communicating freely with the bowel on the one hand and the general peritoneal cavity on the other, and large enough to admit the tip of the little finger. From the point of contact of this opening in the appendix with the adjacent peritoneum, to which it was very slightly adherent, the inflammation appeared to spread mainly downwards, but also over the whole peritoneal surface. Permission to examine the other viscera could not be obtained; but no signs of tubercle could be made out, nor were the abdominal glands enlarged.

On closer examination the specimen shows a very intense inflammation of the entire appendix. From the orifice of the ulcer, which is situated about the middle of the appendix, the mucous surface is an ashen grey, and sloughy. It is apparently part of this that has given way; the remainder is intensely injected. It contains nothing. The cæcum is healthy, and the ileum also. In the latter the patches are congested, but not swollen; and the colour is, one may suppose, due to the disturbance of circulation owing to the neighbouring severe inflammation.

Remarks by Dr. GOODHART.—This case is quite a common one, but we think it worth recording because it is so instructive in several ways. And first of all in this, that we consider it to traverse, in a way well worth remark, a statement of Dr. Hilton Fagge in his in many respects inimitable work on Medicine. Dr. Fagge writes: "I have indeed a strong conviction that no case in which the disease can be diagnosed as being seated in the cæcum ever terminates fatally if judiciously managed.....Even when typhlitis presents itself clinically under the guise of intestinal obstruction or of diffused acute peritonitis, I believe that it scarcely ever destroys life if judiciously treated." Far be it from us to attempt in any way to minimise the importance of treating these cases by opium, nutrient enemata, or fluid food, and the avoidance of purgatives. Many a case has certainly been killed by the incautious administration of an aperient. But it cannot be too much insisted upon that these cases are excessively treacherous as regards their symptoms. There were times in the course of the illness in this case when the symptoms were not by any means decisively peritonitic; when all vomiting—by the bye, never very urgent until death was imminent—had ceased; when he had a full pulse and thickly furred tongue, as of some acute febrile disorder. Moreover, it will be within the experience of some of us, no doubt, that typhlitis sometimes presents itself under the guise of a severe pyrexia, so that it has been mistaken altogether for typhoid fever. I have seen several such only cleared up at the post-mortem; and were I to write an article on typhlitis, it would certainly be my business to insist that it is a question in a certain proportion of cases whether they die by the febrile disturbance of the inflamed gut or by the collapse of the peritonitis. And it is very important to insist upon this in the present day. If one were to say nothing about the case, and simply to expose the ulcerated appendix that was removed after death to the light of our knowledge of surgery, without doubt it would provoke the remark, "What a pity the abdomen was not opened and the appendix removed," and we have no wish to turn away from that aspect of the case. One should always be on the look out for localising symptoms in these cases which may enable us to attack them surgically; but I am equally sure from a long experience, and this case bears it out, that in a large number it is impossible to come to any sufficiently definite opinion; and it is impossible to suggest so serious an operation as opening the abdomen unless one can be fairly positive. Even when so there will still be some where the febrile disturbance steps in to unsettle the decision, and I am by no means sure that this is solely the consequence of the disease of the appendix or that it would be dissipated by the removal of that viscus. We discussed these points at the bedside of this poor patient, and we neither of us had any doubt that, whatever might be the cause of the peritonitis, there was nothing at that time that precluded recovery—I personally thought things looked most favourable—and nothing in the symptoms that would allow of our entertaining the idea of opening the abdomen. Thus it is with many another case. Now everything looks hopeful, hardly even critical, and an operation has not come within the horizon; a few hours pass by and the patient is moribund, and the sun of surgery for that case has set. And that is the difficulty of practice.

One word may be added concerning the pain in peritonitis: it is an exceedingly treacherous guide to the localisation of the malady. Others have noted that with disease in the region of the cæcum the pain may yet be experienced chiefly in the left groin, and so at one time it was in this case. The early and persistent inability to pass urine is also worthy of remark. It is a symptom of peritonitis that is well known as an occasional occurrence, but in this instance was peculiarly marked, and in conjunction with the pain at one time present on the left side might well have caused a mistaken diagnosis.

ALBUMINURIA IN THE APPARENTLY HEALTHY.

BY ALEX. W. STIRLING, M.D., C.M.

THE following notes are taken from a paper presented as an M.D. graduation thesis to the University of Edinburgh in the beginning of May. In it I considered the cases of albuminuria of the apparently healthy which had already been published, the experiments which had been made and the reasons why few of them were of value, as well as the theories which had been advanced in connexion with the subject; but in the space now at my disposal I am able to introduce only a brief notice of some of the points there discussed more fully.

Table I. will give at a glance the general results of observations made on the occurrence of albuminuria among boys. The greatest care was taken that no error should spoil the results, and at least four different reagents were used to test each specimen of urine, no urine being passed over till I was completely satisfied whether a precipitate were albumen or not. The reagents used were: (1) Heat and acetic acid, which I prefer to any of the others. There is little fear of making the solution too acid in these cases. (2) Nitric acid in the cold. (3) Roberts' brine test, sulphate of magnesia and nitric acid. (4) Picric acid. Also, sometimes, (5) potassium mercuric iodide, and (6) ferrocyanide of potassium. But the first four were used for every urine, and were added by means of pipettes. The boys concerned in this special investigation belong to one of the large training ships on the Thames, and only those in good health were examined. The urine was passed always at 9 A.M., about three hours after rising, at which time albumen will almost certainly be discovered if present at all during the twenty-four hours. It was found in 77 of the 369 boys examined, and I ascertained by several subsequent experiments that, speaking generally, it was not a passing condition, but present at the least for months. The quantities of albumen varied from a slight cloud to one-sixth of the column in the test tube, and in one case—not, however, one of the ship boys—I have seen on several occasions as much as one-half. The urine was generally pale and watery; the specific gravity averaged about 1020; the reaction varied from neutral to strongly acid; deposits, except urates, were rare, though uric acid and oxalates were sometimes present. A considerable number of specimens were examined for tube casts, but with the exception of once or twice, when hyaline casts were doubtfully present, none have been

found. It will be observed, on looking at the table, that the effect on boys of blowing instruments is very marked, a fact which had not been pointed out till I wrote the thesis from which these notes are taken, and which Professor Grainger Stewart, since reading my dissertation, has confirmed in a paper read before the Royal Society of Edinburgh. I have attributed this to the effects of backward pressure on the renal vessels. That it is not due to the age of the boys is evident from the fact that the percentage is higher among the band boys at all ages; and that the length of time during which they have been in the band makes a considerable difference is brought out at the age of sixteen, where the total percentage of albuminurics not in the band is, if anything, less than that at fifteen, while of those in the band at sixteen, who had played for about nine months longer than the boys fifteen years old, the percentage with albuminuria is higher than at the latter age by 5·5. Dr. Lauder Brunton has referred the albuminuria of cold bathing to pulmonary spasm, and Dr. Schreiber has shown by experiment that compression of the thorax in young subjects for ninety seconds will cause albuminuria; while Dr. Ralfe, in criticising Leube's experiments on the effect of exercise, says that the weight of the soldier's accoutrements upon the chest may have been a cause in the production of the albuminuria. M. Stichel of Paris has seen blindness produced by the playing of wind instruments—due, he says, to passive cerebral congestion, with a similar condition of the retina and choroid. It is a difficult thing to decide whether or not masturbation may have anything to do with the albuminuria of adolescents. I requested the chief officer to give me the names of some of the boys whom he knew to be guilty of this habit. He sent me thirty-seven, and on comparing them with my list I found that in the urine of fourteen of the number albumen had been found. It may be that the renal vaso-motor centre is weakened by the habit, but that it is not practised by all adolescent albuminurics I am satisfied.

The following is, in a few words, the daily cycle of the albuminuria as I first observed it in 1881, and my experience since has assured me that it is the common one among adolescents. The urine is usually found to be absolutely free from albumen while the patient remains in bed, and it makes its appearance within a variable but generally short time after the assumption of the erect posture, and independently of food and all other conditions. The albumen continues in the urine for, it may be, only an hour or two, or perhaps in varying quantity throughout the day, but as a rule it is disappearing in the afternoon, and is entirely gone by bedtime. It may be made to disappear at any time by merely lying down, and will not occur in the urine throughout the day if the patient keep quiet in bed; though if he rise towards evening, when the albumen is generally absent or scarce, it will be found to be present in quantity larger than is common at that hour, though not always in so great amount as is found under ordinary circumstances in the morning. The ingestion of food has little effect in producing the albumen, and *it is not breakfast which causes the frequency of its appearance in the morning.* Sometimes I have seen a slight rise after a meal, but this is trivial and by no means constant. I had boys brought ashore to the infirmary and confined to bed, and then albumen was absent from the urine till they got up, breakfast or other meals having no effect. I have made very many and various experiments in connexion with this subject, all tending to prove the same thing. One case, not a ship-boy, lived entirely on milk for thirteen months on account of the albuminuria, but that had not the slightest effect in reducing the quantity. The experiments which are said to show that albumen may pass through the urine in a perfectly normal condition of body seem to be insufficient, and it is more probable that there is always some change in the epithelium or blood supply of the kidney, through nervous action or direct irritation, before this is possible. When due to the irritation of crystals, the albumen probably comes from the convoluted tubes, and not from the glomerular epithelium, as it has been said to do. Cases of albuminuria which have been published as due purely to the presence in the blood of a more diffusible albumen formed during digestion show, I think, little evidence of this being the *sole* cause, and are in reality more likely to be dependent upon vascular changes in the kidney peculiar to the period of digestion, to a reflex action on the renal vessels from the digestive canal, or to a deficiency of the barrier power of the epithelium, the result possibly of some previous illness, and so slight as to pass only albumens more than ordinarily diffusible. That there do exist degrees of deficiency in this power of the epithelium is probable from the occurrence of those cases in which the albumen has been found to consist entirely of the more diffusible paraglobulin, or else we must conclude that the apparatus for preventing the passage of paraglobulin is separate from that concerned with serum-albumen. The amount of the urea excreted has no relation to the albumen whatever, the relative amounts of these varying indefinitely, and the actual quantity of urea being usually normal. Exercise, as by walking &c., thoroughly tried in one case, did not have any effect in producing albuminuria, unless complete exhaustion were also produced. When lying in bed in the late morning, when it would certainly have been abundant had he been upright, he worked hard for twenty minutes with a heavy weight without causing the slightest trace to appear. The one thing which does have an intimate relation to the albumen is the rising to the upright position; and so constant has this proved itself that I have proposed the name "postural" for this form of albuminuria. I have also endeavoured to explain its cyclical character in accordance with this fact. The theory of Dr. Pavy, who first applied the term "cyclic" to it, is that it may be compared to the daily variation in the excretion of phosphates in the phosphatic diathesis (which name is sometimes given to a deposit of earthy phosphates, which is not at all uncommon in health and even in acid urines, and which I some years ago ascertained by quantitative analysis not in the least of necessity to indicate an increased excretion of phosphates, even when the fluid has been as white as milk from their presence), and also to the daily rise and fall of the body temperature, neither of which, Dr. Pavy[1] says, have so far been found susceptible of explanation. He therefore concludes that the albuminuria is an illustration of a "physiological cyclic change." The following I wish to offer as another explanation of the periodicity of the condition:—When the individual in question is recumbent, the renal vessels are nearly on a level with the heart, there is no great column of blood to be supported, and this, along with the absolute rest of the sleeping condition, tends to a state of easy circulation through the kidney. The vessels are able to contract gently on the blood, the tendency to congestion which they experience during the day is removed, and by morning they are quite unaccustomed to the necessity of any special effort to keep up a normal state of matters. Then comes the time to rise; the patient jumps from bed, a sudden rush of blood takes place to the kidney, the vessels are thrown into a state of wide dilatation, and they, or perhaps I should rather say the nerves which govern them, receive a shock which they are unable to resist, and for the time being they are more or less paralysed. How long this condition of paresis may last depends partly on their power of recuperation, and partly also on the stress which is afterwards laid upon them. If these are favourable to recovery, we may find the urine cease to be albuminous in a few hours after rising; or if not, it may continue in greater or less quantity throughout the day, increased at intervals by any new stress laid upon it, such as by meals. These, however, may have an opposite effect by stimulating or supplying nourishment to the tissues, as has been exemplified in at least one case. Then sometimes it has been noticed that if a patient be in bed during the day and get up towards evening, the albuminuria has not been so marked as if he had risen on first awaking, probably because the greater excitement of the waking condition and the strength supplied by food had gently accustomed the renal vessels to a state of greater activity without paralysing them, so that they were, so to speak, not surprised on the change of position taking place, and were better prepared for the strain consequent upon it.

I cannot at all agree with Dr. Ralfe that the one cause of this albuminuria is an increased haemolytic action of the liver, for I have seen no evidence at all to bear that out, nor have I been able to find any fat or metallic-looking spangles such as have been described by Teissier,[2] and which cause him to believe that the pathology of the condition is an over-action of the liver. Neither is a high tension of the arterial system a common feature of these cases, the reverse being more usually found. It is unusual to find the heart enlarged or its impulse accentuated, and the pulse is often soft and yielding. I annex a sphygmo-

[1] THE LANCET, vol. ii. 1885, p. 706.
[2] Ibid., March 26th, 1887; and Lyon Médical, March 13th, 1887.

TABLE I.—GENERAL RESULTS OF OBSERVATIONS MADE ON THE OCCURRENCE OF ALBUMINURIA AMONG BOYS.

Age.	Total number of boys.	Number of albuminurics.	Number of boys not in band.	Number of albuminurics not in band.	Number of boys in band.	Number of albuminurics in band.	Apparent effect of band.	Average length of time (in months) in band.
12	20	1, or 5·0 per ct.	19	1, or 5·2 per ct.	1	0, or 0·0 per ct.	0·0 per cent.	3·0
13	59	6, or 10·2 ,,	54	5, or 9·2 ,,	5	1, or 20·0 ,,	10·2 ,,	9·3
14	88	14, or 16·0 ,,	71	6, or 8·4 ,,	17	8, or 47·0 ,,	38·6 ,,	13·0
15	147	43, or 29·4 ,,	112	19, or 17·0 ,,	35	24, or 68·5 ,,	51·5 ,,	21·2
16	55	13, or 23·6 ,,	49	8, or 16·3 ,,	6	5, or 83·3 ,,	67·0 ,,	30·7
Totals	369	77, or 20·8 ,,	305	39, or 12·8 ,,	64	38, or 59·4 ,,	46·6 ,,	—

TABLE II.—GENERAL RESULTS OF OBSERVATIONS MADE ON THE OCCURRENCE OF ALBUMINURIA IN CHILDREN AND ADULTS.

—	Ages under 10.			Ages from 10 to 20.			Ages from 20 to 30.			Ages from 30 to 40.			Ages from 40 to 50.		
	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.
Ship-boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Workhouse ...	6	4	66·6	5	5	100·0	2	1	50·0	2	1	50·0	4	3	75·0
Cement works...	—	—	—	4	1	25·0	10	1	10·0	9	3	33·3	3	—	—
Ship's officers ...	—	—	—	—	—	—	1	—	—	5	1	20·0	4	1	25·0
Brewery	—	—	—	—	—	—	7	—	—	4	—	—	—	—	—
Totals	6	4	66·6	9	6	66·6	20	2	10·0	20	5	25·0	11	4	36·4

TABLE II.—(*continued*).

—	Ages from 50 to 60.			Ages from 60 to 70.			Ages from 70 to 80.			Ages from 80 to 90.			Ages from 90 to 100.		
	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.	Number examined.	Number of albuminurics.	Percentage of albuminurics.
Ship-boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Workhouse ...	—	—	—	7	6	85·7	8	6	75·0	6	5	83·3	1	1	100·0
Cement works...	2	1	50·0	1	—	—	—	—	—	—	—	—	—	—	—
Ship's officers ...	1	1	100·0	—	—	—	—	—	—	—	—	—	—	—	—
Brewery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	3	2	66·6	8	6	75·0	8	6	75·0	6	5	83·3	1	1	100·0

SUMMARY.

—	Total number examined.	Total number of albuminurics.	Total percentage of albuminurics.	Average age.	Age varying from—
Ship-boys	369	77	20·8	14½	12 to 16
Workhouse	41*	32	78·0†	50	5 to 94
Cement works	29	6	20·7	31	14 to 66
Ship's officers	11	3	27·3	39	29 to 51
Brewery	11	—	—	28	21 to 36
Totals	461	118	25·6	33½	5 to 94

* Of these 16 were females; average age 34·7, varying from 5 to 94.

† This large percentage is probably due to the numbers of subjects at the extremes of age. It is probable that there is some atrophy of renal structure in the very old, and among the men enlarged prostate may produce some irritation of the urethra which may be sufficient to account for some cases. Many of these cases have been examined three times, and the albumen was present on each occasion.

graphic tracing of the most marked case of "functional" albuminuria which I have met with, one in whose urine I have often seen as much as one-half of the column in the test tube to consist of solid albumen. This is a case of a young gentleman now aged twenty-three, whom I have had under observation for six years, and who, though the albuminuria is as marked as ever, has fairly good health, which has not deteriorated during that time. His retina was perfectly healthy, blood in good condition, and his chief trouble was constipation and griping pains in the abdomen, accompanied by a languid state of body. (See sphygmogram.)

Most of my cases have complained of nothing whatever, but have been growing boys; and though the majority of them have had measles, a history of scarlet fever, diphtheria, or the other illnesses usually supposed to be capable of leaving behind them unpleasant traces on the kidney, has not been at all common.

By way of treatment I have used iron, arsenic, strychnia, ergot, arbutin, digitalis, &c., but the beneficial effect of any of them is not sufficiently distinct to be discussed among these notes.

With regard to the advisability of insuring cases of cyclic albuminuria, I have suggested that, in the present state of our knowledge, the most satisfactory method of dealing would be for the companies to accept an apparently healthy albuminuric at a high premium, agreeing however, to re-arrange this on their being satisfied of the disappearance of the albumen for such a length of time as would give reasonable expectation of this being permanent.

Lately I have made some further observations, chiefly on older people; and these I give concisely in the form of a table. (See Table II.)

A METHOD OF TREATING POTT'S FRACTURE.

BY E. W. ROUGHTON, M.D. LOND., F.R.C.S.,
ASSISTANT DEMONSTRATOR OF ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

IN the condition known as Pott's fracture the displacement which occurs is twofold—viz., (*a*) outwards and (*b*) backwards. The first of these deformities is universally recognised, but the second is often overlooked, I believe, because the ordinary method of putting up this fracture (in back and side splints) hides the displacement backwards whilst the apparatus is on, although it does but little to remedy it, so that when the patient begins to walk he finds that his progression is considerably impeded. An examination of the foot in such a case will show that the heel is much more prominent than it should be, that the concavity of the tendo Achillis is increased, and that the foot, if measured from the anterior margin of the lower end of the tibia to the end of the big toe, is found to be shortened. This appearance is shown in Fig. 1.

The ordinary method of treating Pott's fracture by back and side splints is unsatisfactory, because (*a*) considerable difficulty is found in correcting the outward displacement of the foot, necessitating constant rearrangement of the side splints, and (*b*) the backward displacement is not adequately affected unless so much backward pressure is made on the ankle as to incur the risk of a sore heel. To get over these difficulties Cline placed the limb on an outside splint (known as Cline's splint) and flexed the knee so as to relax the calf muscles. This method answers very well as far as the outward displacement is concerned, but has hardly any effect on the backward one. To remedy the latter I have adopted the following modification of Cline's method. The splint used is an outside splint with a foot-piece (Fig. 2), *padded thickest where the foot-piece joins the other portion of the splint*. Three bandages (made of a double fold of Domett bandage) are fixed by means of safety-pins at the points A, B, and C, and placed in the position indicated in the figure. The injured limb, having the knee flexed, is then laid upon the splint so that the outer edge of the foot is well supported by the thick padding before mentioned, and fixed by the bandages in the manner shown in Figs. 3 and 4. Bandage A is first applied; it passes backwards between the limb and the splint, then turns forwards around the back of the limb and makes traction forwards. This is fixed, and then bandages B and C are drawn tight at the same time. Bandage B passes forwards between the splint and the limb, then turns over the front of the leg and pulls backwards.

FIG. 1. FIG. 2.

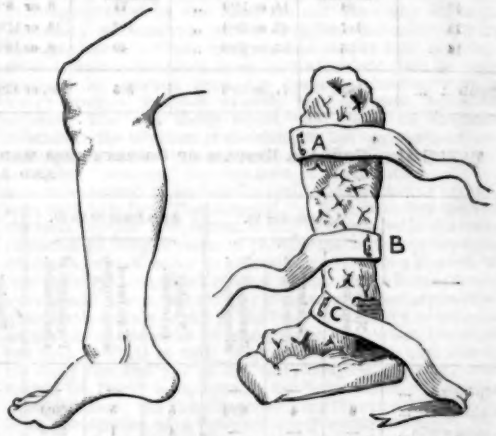

FIG. 1.—Showing the backward displacement of the heel in Pott's fracture.
FIG. 2.—Showing splint with the bandages attached. C is the "heel bandage."

Bandage C (which is the important one) passes from before backwards, between the splint and the limb, *turns over the point of the heel*, and pulls forwards and downwards. Bandages B and C are then fixed by taking another turn around the limb and splint, and fastened with safety-pins (Fig. 4). If necessary, an evaporating lotion may be applied over the inner ankle, which is left uncovered by bandage. Usually in forty-eight hours the heel bandage requires to be tightened, owing to relaxation of muscular spasm. When

FIG. 3. FIG. 4.

FIG. 3.—Showing the direction in which the bandages pull.
FIG. 4.—Showing the limb fastened on the splint.

the bruising has subsided and sufficient union has taken place, this apparatus is removed and the limb put up in a "silicate" splint, taking care to keep the foot well inverted and at right angles to the leg. After the removal of the silicate splint the ankle may be found somewhat stiff, but this condition may be remedied by manipulation under an anæsthetic.

I have found this method of treating Pott's fracture very

simple and efficient, the foot and ankle eventually being as useful and shapely as before the accident. The great advantage of the "heel bandage" is that it exerts uniform and slightly elastic pressure in the direction required, and never produces that unfortunate result—a sore heel.

PERSISTENT HIGH TEMPERATURE IN A BOY, DEPENDENT UPON SUPPURATION WITHIN THE TYMPANUM (?)

BY WILLIAM H. DAY, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

A. C. W——, aged nine, was admitted into the Samaritan Hospital under my care on March 23rd, 1887. He was a highly nervous and sensitive boy, with thick lips, pasty face, expanded nostrils, and light hair. The parents and five other children of the family are healthy.

History.—Three weeks before admission he is said to have fallen in the street whilst running, and to have struck himself on the left temple. It is reported that he was picked up in a state of insensibility and carried into a shop. From that time to the present he has not been to school or into the playground. His mother states that after the accident he became very drowsy, sleeping nearly the whole day in a chair, but apparently not ill. He has had headache for a week, and giddiness and "wandering" up to the present. One day at home he was sick and ill, his mother thinking he might be going to suffer from some fever. A week before he fell he was knocked down by a boy and kicked in the groin and stomach. For some days after he complained of pain on micturition.

State on admission.—He complains of pain in the left hip and over the great trochanter, which is tender on pressure, but there is no obvious swelling or heat, and he can flex and extend the limb without pain. He is indisposed to answer any question, being very drowsy, though quite sensible and intelligent. He also complains of headache, and will not expose his face to the light, but hides it under the bedclothes. The abdomen is natural; the tongue is clean; the bowels are costive. There is a good deal of cough, but the physical signs are only those of slight bronchial irritation; no dulness can be detected in any part of the chest; the heart's sounds are normal. Temperature 104°; pulse 100; respiration 36. The urine is of a dark sherry colour, acid, non-albuminous, sp. gr. 1026. A soap-and-water enema was used, which brought away a copious scybalous dark motion. After this, the skin being dry and dirty, he was put into a warm bath. A mixture containing salicylate of soda and solution of acetate of ammonia was given every four hours. He was supplied freely with milk and beef-tea. At 9 P.M. the temperature rose to 104·4°; pulse 124; respiration 36. No complaint was made of any kind.

On March 24th it was reported that he had passed a quiet night, and did not seem quite so drowsy. The morning temperature was 103·6°, the evening 102·6°. On the 25th a grain of calomel was given, followed by an enema, which produced a copious and light-coloured motion. The temperature at 8 A.M. was 101°; pulse 104; respiration 36. At 1 P.M. the temperature rose to 104°. At 5 P.M. he asked for bread-and-butter and a picture-book, but he soon grew tired and relapsed into sleep. There was no pain, vomiting, or thirst. Five grains of antipyrin were ordered every four hours. At 12 P.M. the temperature was 103·4°. On the 26th, at 6 A.M., the temperature was 103°, when five grains of antipyrin were given, and in two hours it fell to 101·4°; throughout the day it did not exceed 102·6°. The boy enjoyed looking over books, and the only noticeable symptom was undue disposition to sleep. The temperature during the following day varied between 102° and 103·4°, and he invariably roused himself from his drowsy condition after being sponged with cold water. The same physical signs of bronchial irritation were present. The antipyrin was omitted. On the 28th the bowels freely acted. At 3.30 P.M., when the temperature reached 103·4°, he was put into a bath at 90°, which was gradually cooled down to 70° by the addition of cold water. He remained in the bath seven minutes, and when removed to bed, between blankets, the temperature was lowered to 98·6°. At 7.15 it rose again to 103°, when he had another bath. At 7.40 it was 100°; and at 12 P.M. it had risen to 101°. On the following day (29th), at 9.40 A.M., the temperature being 103°, he had another bath for five minutes, when it fell to normal. At 1 P.M. the temperature rose to 104°, and again he had a bath for five minutes, when it fell to 101°, and he became rather livid about the face and hands. At 3.30 the temperature was 103°, and he had a renewal of the bath for five minutes. Ten minutes afterwards the temperature was 98·6°. At 5 P.M. it rose to 103°, and the bath was repeated with like effect. At 7 P.M. the temperature rose again to 104°, and he had another bath. The patient has never had any distinct delirium, and complains now of no pain anywhere. He enjoys his food, but is very pale. When the temperature rises there is no change in his general condition. The morning and evening temperature was 102°; the pulse was regular and good; urine dark sherry colour, acid, sp. gr. 1024, non-albuminous. Cold sponging of the face, body, and extremities was performed three times a day. On the 30th, the temperature being 103° at midday, he was placed in a bath for five minutes. Two grains of quinine were given. At 5.30 the temperature was 104°, but after being in a bath for five minutes he became rather livid and his feet were cold. The temperature was 102°. At 8 P.M. the temperature ran up to 104°, when he had a final bath for seven minutes, the mercury falling to 100°. Pulse 88. The quinine was repeated. On the 31st he complained of pain at the lower part of the sacrum, and was fearfully alarmed at any attempt being made to examine it, his leg being instantly drawn up, and even the weight of the bed-clothes being insupportable. Throughout the day the temperature remained at 103°, notwithstanding cold sponging and quinine. On April 1st he seemed equally distressed, shrieking out and complaining of pain in his hip and sacral region. He was terror-stricken when local examination was attempted. At 1 P.M. the temperature was 105°. The boy admitted later in the day, when seen by myself and Mr. Marmaduke Sheild, that if it were not for the pain in "the back" he should be well, and with a little encouragement he was persuaded to get up and run about the ward. A careful examination was at this time made for disease of the hip or pelvic bones, or caries of the spine, but none of these conditions were detected. In the morning of April 2nd he appeared unable to move, but when his tea was brought to him he sprang up and took it greedily. The highest temperature during the day had been 104°; he had coughed slightly. No remedies seemed to control the temperature for any length of time. On the 3rd, in the early morning, his temperature was 100°, but at 2 P.M. it ran up to 104·6°; notwithstanding this, he took his food well and remained remarkably quiet. On examining the chest no dulness could be detected, but loud rhonchi and cooing sounds were universal over both lungs; the cough was now loose and more frequent. He had greatly wasted since admission, but for the last two days there had been sudden and considerable discharge from the right ear, with deafness. On the 6th the highest temperature was 99·6° and the pulse 84. He was ordered a grain of quinine in hydrobromic acid, and liquor strychnia three times a day. Two days later the temperature ran up to 104°, but he sat up in bed and enjoyed his food, and seemed as well with a high as with a low temperature. On the 11th, the temperature being 101° and the pulse 80, I ordered him meat once a day, and for the next five days the morning temperature was normal, the highest evening being 100°. On the 16th his temperature was normal, he slept less, and talked and played with the other children. He rarely coughed, and his chest was perfectly free from bronchial sounds. The appetite was voracious. For the next seven days his temperature was normal both morning and evening. On the 24th visitors came to see him, and the temperature soon afterwards ran up to 104°; he complained of headache, but seemed well, and relished his food. His medicine was omitted, but resumed again on the 28th. The temperature vacillated between 101° and 103° till May 5th, when it became normal. The urine was of a deep sherry colour; sp. gr., 1026; slightly acid, non-albuminous. As a rule, he slept from 7 P.M. till 7 A.M. without moving, and also generally five hours during the day; so that on an average he slept seventeen hours out of the twenty-four. On May 10th the boy got up, and neither morning nor evening did the temperature exceed 98·4°. He had gained flesh, and during the past week colour had returned to his face, and his drowsy condition had disappeared. He was discharged on June 8th. On July 30th

he was reported well, and had suffered no return of febrile symptoms.

Remarks.—This is an unusual, and in some respects a remarkable, case. Although I have met with several instances of unaccountable pyrexia in adults, and especially in children, I have no record or remembrance of any case resembling in its features the one under consideration. Were the symptoms due to some alteration or disturbance in the nervous centres originating in the fall on the head? Were they dependent upon suppuration in the middle ear, or on some undetected condition of disturbance of the digestive system? There is much to recommend the first view. The boy was of a nervous and excitable temperament, and his condition on several occasions closely approached that of "hysteria" in the opposite sex. Moreover, the extraordinary variations in the temperature were suggestive of a neurotic origin. So, too, there were none of the constitutional signs of fever that would have necessarily accompanied a pyrexia of this kind if dependent on the usual causes. The drowsy and lethargic state has often been noted in neurotic individuals, in some cases leading to trance, or the nine days' wonder of a sleeping girl. Yet we have to recollect, on the other hand, that deeply seated collections of matter are often only signified by curious variations in temperature, and that excessive drowsiness with fever is often symptomatic of ear mischief. The rapid improvement of the boy after the discharge of pus would lend some colour to this view of the case. For the first few days I was inclined to think that pulmonary tubercle might be the slumbering element of mischief in this case, as evidenced by the protracted bronchial irritation. But when this had passed off, and there were no special signs of tuberculosis, it appeared to me improbable. The true import of such a high temperature was indeed doubtful. And in this, as in all such cases, I thought it wise to exercise vigilant supervision, and enjoin the strictest rest of mind and body. A remarkable feature in the case was the tendency to drowsiness and torpor. This was an early and constant symptom, and pointed to some important change in the nervous centres. Throughout the illness there was great lethargy, and during much of the time profound stupor, from which he could not be always roused. He generally lay on his left side, with calm features, and when asleep he had quiet respiration and slow pulse. It seemed whilst this drowsy state continued that he might pass into a comatose condition and die. Such a termination seemed not improbable if the patient was not roused to take nourishment. Pyrexia occurring without the general symptoms of fever is especially likely to occur from slight causes in neurotic individuals. It is quite likely that the true explanation of this case hinges on this observation. A delicate and sensitive lad gets the sequence of events not uncommonly noticed. A blow on the head, some suppuration about the tympanic cavity, possibly old mischief lighted up into fresh activity, and a curious train of febrile and head symptoms supervene. In an older person, or a lad of more stolid temperament, the symptoms would probably have been less complicated; but the case affords a striking instance of the readiness with which the temperature of a boy may undergo curious variations, and the great difficulty we often have in practice to trace such complications to their true origin.

ANTIPYRIN AS AN ANODYNE.

By OSCAR JENNINGS, M.D.

THE remarkable effect of antipyrin in the treatment of pain attracting general attention at present, the following cases may be of interest to the readers of THE LANCET.

1. A middle-aged lady with slight ataxic symptoms, including loss of knee jerk, whose chief trouble consisted of intermitting darting pains in the thighs and legs, and constant burning pains in the heels. She was supposed by consultants to have an arthritic affection of the sheath of the cord. Iodide, quinine, colchicum, salicylates, and electricity in various forms, had been all used without success. Antipyrin proved entirely useless, but the patient was slightly improved by a season at Lamalou.

2. A stout middle-aged female medical attendant, a large eater, and unable to get any exercise except in a carriage with her employer, was suffering from subacute gout in the foot. She took four grammes of antipyrin daily for a week without any marked improvement, recovery being slow, and probably independent of the medicine.

3. A stout man, thirty years of age, head waiter in a Paris restaurant, suffering from acute gout, was relieved by the same doses in twenty-four hours.

4. An unmarried middle-aged lady, crippled by double sciatica, which obliges her to use two sticks to get about, and who suffers more or less constantly from pain, had tried everything that could be suggested. She tried antipyrin, and it was unsuccessful.

5. A gentleman, aged sixty-nine, was sent to me for a painful affection about the shoulder, which had resisted all kinds of treatment directed by the most eminent neurologists in America. The malady had been variously described as neuralgia, neuritis, and myositis. The symptoms consisted of periodical paroxysms of pain, recurring at night, with inability to move the arms upwards and backwards (to brush the hair, for instance) without causing painful spasm in the muscle. There was also a dull, fixed pain in the right side, and hypochondriasis. Professor Ball, who had recommended the patient to place himself under my care for an electrical treatment, prescribed iodide of potassium and euonymin, by which the pain in the side was permanently relieved. The improvement about the shoulder joint, however, was slow, and the patient, who had expected to be entirely cured by electricity in a month, was becoming discouraged. Professor Sée's communication appearing at this juncture, it was decided to give antipyrin a trial. At first it had but little effect, but after a few days' administration by the mouth hypodermic injections were used instead, with a satisfactory result. The patient, if not cured, recognised that he was greatly improved in every respect – a statement endorsed more strongly by all his friends.

6. A washerwoman, aged forty-nine, was attending at the clinique of St. Anne with precisely the same symptoms, and, besides limitation of the movements upwards and backwards by pain, there was considerable wasting of the muscles. Faradic electricity had been employed for six weeks with the best effect; the paroxysms of pain were relieved, movement improved, and the volume of the muscles restored. The patient, although at considerable inconvenience to herself, never failed to attend the electrical room for treatment. There remained, however, a dull pain, to which she was so accustomed that it was no longer a subject of complaint, and was only mentioned when she was interrogated upon this point. Encouraged by my experience in the preceding case, I again tried antipyrin hypodermically, with an excellent result. The patient now takes one gramme per day and is free from pain, any movement being possible without uneasiness.

7. Antipyrin being said to relieve pain by lessening the perceptibility of the nervous centres, I thought it might be worth a trial in the morphia craving. I gave it in one case which has been already mentioned in the columns of THE LANCET, but the result was not encouraging. The patient stated that it made the craving worse. This, however, may have been a wilful representation for the sake of obtaining a little more morphia. He said, moreover, that he felt sick and giddy, and, as a matter of fact, he did not look well.

8. Upon the same theoretical grounds I gave antipyrin in one case of sea-sickness with good effect.

9. The most striking benefit I have seen following the use of this drug was in the following case:—An American gentleman, an artist, had been overtaxing both body and brain for some time in order to get a picture finished. He had been working in a cold *atelier*, taking meals irregularly, and was morbidly anxious as to success. He had already lost appetite and become sleepless and restless, when he was seized with violent abdominal pains, accompanied by frequent stools containing blood, cerebral excitement, and subdelirium, with fear of impending death or insanity. He was the more excited when I saw him inasmuch as he had been anxiously waiting for an English doctor the whole afternoon, and was just then threatened with a visitation from no less than three. A colleague who arrived shortly after myself suggested the possibility of typhoid, but, as the management of the case devolved upon me, I accepted the diagnosis of the family, which was visceral rheumatism, ordered a morphia suppository and a mixture containing chloral and bromide to allay the symptoms depending upon the brain. The next day the pain was still severe, although the mental excitement was lessened, and

the patient begged for a hypodermic injection of morphia, which, he said had been used with benefit upon a previous occasion. This I gave, and was called upon to repeat the dose in the evening. The next morning morphia was again demanded and given, and as I had resolved not to make any more hypodermic injections, I told the patient I could give him no more morphia except in the form of suppositories, and prescribed antipyrin, to be taken in fifteen-grain doses every four hours. The administration was commenced under the influence of the last hypodermic injection, and the pain never returned, the patient rapidly convalescing and leaving Paris shortly after for the United States.

10. I have given antipyrin in one case of zona. The pain disappeared after the third dose of fifteen grains "like a charm," to use the patient's own expression.

11. Of two cases of inflamed painful sore-throat of rheumatic origin, one was greatly relieved.

12. In migraine there can be no doubt as to the efficacy of antipyrin for a time, although, in my opinion, the dose requires to be larger than those mentioned by some correspondents of THE LANCET—fifteen grains at least. I am afraid, however, that the effect will often be found to wear off after a time, or that it will be necessary to increase the dose to an imprudent extent. I know a lady who has been taking antipyrin for migraine for two months, and who already finds that it has lost most of its "magic," although it still procures some relief. M. Norström tells me he has had similar experience.

To sum up. If antipyrin is not an unfailing specific, I have certainly seen it allay pain as speedily and more radically than a hypodermic injection of morphia. Whether any evil results are likely to follow its prolonged use remains, of course, to be seen. There is a good deal of talk at present about the possibility of benzine poisoning resulting from the admixture of this substance with the drug, owing to imperfect preparation, but I must confess that every solution I have used hypodermically has smelt of benzine, and until the end of September, when I purchased an inodorous sample in London, I was under the impression that this was always the case. Like others I have frequently seen giddiness, vertigo, and nausea follow the administration of antipyrin, and ecchymoses and induration at the seat of injection. In one instance where I had associated it with cocaine, according to a formula much used in Paris, the patient felt prostrate and miserable for four or five days. This has never occurred with antipyrin alone.

Paris.

ANTIPYRIN IN THE TREATMENT OF MIGRAINE.

BY W. H. RUSSELL FORSBROOK, M.B. LOND.

So far as I know, the treatment of this troublesome and frequent disease by antipyrin has not been tried in this country. I was induced to try it in the first instance after having read an account of the drug in THE LANCET, written by a German physician, who had given it with success in this and various neuralgias; and I have now myself prescribed it in some hundred cases with an almost magical result. The causes and symptoms of migraine are well known, but its pathology is not so clear, and its treatment by the numerous remedies hitherto recommended has effected little or nothing, in the majority of cases, in shortening an attack. I think, therefore, the misery, depression, and extreme feeling of illness it causes while it lasts, and the almost immediate relief from all this, are a sufficient excuse for venturing to write a short account of my experience of its treatment by this drug.

I have found antipyrin given in fifteen-grain doses every twenty minutes three times consecutively almost invariably removes the pain, depression, drowsiness, nausea, &c., so that in forty minutes, frequently even after one dose, patients express themselves quite well. A single dose, if given during the premonitory signs, will often ward off an attack. Sometimes I recommend another dose in four hours, but not often, as I find the very few cases in which there has not been absolute removal of pain after the third dose, but only partial relief, are seldom further affected. These few cases, however, which are not amenable to the speedy action of the medicine, seem to have the duration of the attack much shortened. One important fact is noticeable, that the period between the attacks has seemed to me to be prolonged; also that succeeding attacks have not been so severe after its administration. The pulse, which is generally slowed during an attack of migraine, appears in some cases to be rendered fuller and quicker. Antipyrin, when given to young women for migraine, sometimes produces a species of intoxication, so that it is as well to be on one's guard; although, so far as my limited experience goes, the only result has been the almost certain and immediate relief from the peculiar pain &c.

According to one theory of its pathology—that of Dr. Liveing,—migraine has a close pathological relation to epilepsy; although one disease is said never to pass into the other. Dr. Liveing thinks that the immediate antecedent of the attack is a state of unstable equilibrium and gradually accumulating tension in the parts of the nervous system especially involved, the paroxysm being somewhat similar to a storm. He considers the seat of the disease to be the optic thalami and the parts between those bodies and the roots of the vagi. Thinking of this close relationship between the two diseases, I commenced to give antipyrin in the headache following an epileptic seizure, and I was glad to find that it acted quite as well as in ordinary migraine in six out of seven cases. I have also prescribed it, following out the analogy, in those cases of epilepsy indicated by premonitory symptoms, or by the so-called aura epileptica, and in the only two cases in which I have tried it I certainly believe that it prevented an attack in one of them; but naturally the drug requires a much more lengthy and searching trial with respect to the headache following an attack of epilepsy, and especially as to its power in the prevention of an attack preceded by an aura, and I merely throw out these hints in the hope that someone with extensive practice in epilepsy will experiment. I have most certainly proved the great value of antipyrin in migraine in my own practice, and I ask others to prescribe it in order to be convinced of its specific action.

Buckingham-palace-road, S.W.

MERCURIC BINIODIDE GAUZE:

A NEW ANTISEPTIC DRESSING.

BY J. C. VOIGT, M.D. EDIN.,

LATE SENIOR RESIDENT MEDICAL OFFICER, BURY INFIRMARY.

SINCE Jan. 1st, 1886, I have used a gauze prepared in the following way. Plain absorbent gauze is steeped in a 1 in 500 solution of mercuric biniodide in iodide of potassium and glycerine: Hydrarg. iod. rubr., 1 dr.; pot. iod., 3 dr.; glycerine, 4 oz.; aqua ad 80 oz. After being well soaked in this solution, the gauze is squeezed out and hung to dry in a darkened room. For irrigation of wounds and washing out of abscess cavities I employ a stock solution of hydrarg. iod. rubr., 2 dr.; pot. iod. 4 dr.; glycerine, 12 oz.; aqua ad 80 oz. This is diluted (with water) from four to eight times before being used. The solutions thus diluted are substitutes for the 1 in 1000 and 1 in 2000 corrosive sublimate solutions. For the dressing of ulcers much weaker solutions—1 in 20,000 and 1 in 40,000—have been employed. The following cases are given as illustrations of the foregoing:—

1. *Right-sided empyema.*—Lilias A——., aged eight years. Empyema opened Jan. 15th 1886. Cavity syringed out with 1 in 10,000 biniodide solution, and drainage tubes inserted. Washed out daily with the solution (diluted to 1 in 20,000 after the third day) and tubes shortened. Drainage tubes removed in three weeks. Patient discharged cured.

2. *Deep cellular inflammation and suppuration under the scalp (after a blow on the head).*—Nancy H——, aged forty-one. Treatment commenced on Feb. 3rd, 1886. High evening temperatures and rigors. Suppuration, involving nearly half the scalp. Free incision and drainage. Syringing with the 1 in 1000 biniodide solution, and dressing with biniodide gauze. Cured by Feb. 15th.

3. Thomas R——, aged thirty-seven. Similar case to the above (after wound of scalp). Here the biniodide solution was substituted for the corrosive sublimate on the third day of treatment, after drainage-tubes had been inserted and counter-openings made. The amount of discharge was noted as being "much less" at the following dressing. The drainage tubes were gradually shortened, and the patient was discharged cured in twelve days.

4. *Large axillary and subclavicular abscess.*—R. W——, aged forty-four. Drainage tubes inserted (after free incision) into axilla, and under pectoralis major. Abscess cavity

syringed out with biniodide solution, and biniodide gauze dressings applied. Patient discharged cured in fourteen days.

5. *Suppurating bursæ patellæ.* (Three cases.)—Free incision, with mercuric biniodide irrigation and dressings of biniodide gauze, followed by iodoform and iodol ointments.

6. *Deep abscess of thigh with suppurating bursa patellæ.*—William C——, aged thirty-six, fell and injured his knee on Nov. 5th, and, when seen on Nov. 7th, the bursa patellæ was found enlarged and inflamed, there was considerable swelling round the knee-joint, and the lower and outer part of the thigh was tender to the touch and swollen. When fluctuation could be distinctly made out, an incision four inches long was made along the outer aspect of the lower part of the thigh. A considerable quantity of pus escaped. The bone was found healthy. The abscess cavity, after being well washed out with the 1 in 1000 solution, was drained and dressed with biniodide gauze. The suppurating patellar bursa was also freely opened and drained. The patient was discharged cured in ten days.

7. *Exploratory incisions, elbow, hip, and knee joints.*—Jas. N—— and Wm. L——, aged forty-one and twenty-five respectively. Extensive suppuration round elbow joint, as a result of injury. Free incision along the posterior aspect of the joint. Olecranon process found denuded of periosteum. Pus evacuated and sinuses laid open. Wounds syringed out daily and packed with biniodide gauze. Both cases discharged cured, with partially movable joints, after a couple of weeks' treatment.

8. *Morbus coxæ.*—Albert O——, aged four, seen in February, 1887. A large bulging abscess found surrounding the hip joint. Exploratory incision (under mercuric biniodide irrigation) along posterior aspect of trochanter. Head of femur found in position in acetabulum. More than a pint of thick pus escaped from the abscess cavity, which extended downwards to about the middle of the thigh and upwards under the gluteal muscles. Long, large-sized drainage tubes inserted; biniodide dressings and extension apparatus applied. Abscess cavity syringed out daily, and tubes gradually shortened until removed altogether. Discharged cured on April 5th.

9. *Suppurating knee joint.*—Henry W——, aged eleven. Joint laid open and drained. Irrigation by mercuric biniodide solution. After two months' treatment, joint found anchylosed and wounds healed.

Summary.—As compared with corrosive sublimate, I find that the biniodide dressings give (1) just as efficient antisepsis, (2) less risk of toxic constitutional effects, and (3) less irritation of the parts surrounding the wound.

Southport.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

PRIMARY CANCER OF FEMALE BLADDER; OVARIAN CYSTOMATA; GROWTH REMOVED BY VAGINAL CYSTOTOMY; FRESH GROWTH AGAIN REMOVED BY A SECOND OPERATION; RECURRENCE; SECONDARY GROWTHS IN OTHER ORGANS; THIRD OPERATION; DEATH.

(Under the care of Dr. HERMAN.)

THE following is interesting as the complete history of a vesical tumour. The symptoms produced by the presence of the growth were spread over a long period, and this, with the appearance of the tumour, made it probable at the time of the first operation that it was of innocent character. The report of the microscopic examination was, however, in favour of malignancy, and the repeated recurrences and general dissemination of the disease proved this to be correct. The following notes are by Messrs. Pugh, Lubbock, and Lys, clinical clerks.

S. W——, aged fifty-nine, was admitted into the Victor ward on July 8th, 1885. The patient came to the hospital complaining of passing blood with her urine, of vomiting, and of swelling of the abdomen and legs. She did not know of any relative having suffered from cancer or from any disease resembling it, nor from phthisis. Both parents long lived. She had always lived in the country till the last eight months. Had always been strong and healthy till the present illness. Had all her life worked hard. She first menstruated at thirteen; the flow used to last four or five days, was moderate in quantity, but accompanied with severe pain, beginning two or three days before the flow, relieved on the appearance of the flow, and ceasing on the second day of the flow. She was married at eighteen, but never became pregnant. Menstruation ceased at thirty-four. Her bladder troubles dated from six or seven years back. Then she began to have to strain a good deal in micturition, and her urine was of a deep yellow colour, staining her clothes when it dropped upon them. Two years after this the urine became of a much deeper colour, began to contain small lumps, which she believed to be clots, and there was a sediment after the urine had stood. She could feel the passage of these clots, as they sometimes caused temporary stoppage of the flow of urine. Ever since then she had been passing blood at variable intervals; sometimes she would go as long as eight or nine weeks without passing any, sometimes not so long. The last severe attack was nine weeks ago, when she passed a large quantity of blood, making her feel very weak. Very little has been passed since. About a year ago the abdomen began to swell, and this has especially increased during the last nine weeks. The swelling of the legs began after the last severe attack of hæmaturia. Patient has been losing flesh for some months.

On admission the patient was pale and anæmic, but not much emaciated. Appetite bad; bowels confined. The abdomen was distended by a rounded, firm, elastic, fluctuating swelling; it was dull in front up to five inches above the umbilicus, resonant in the flanks. The circumference at the umbilicus was forty-two inches. Per vaginam, the cervix uteri was found to be healthy; a large solid lump was felt to the left and in front of the cervix. The urine drawn off with the catheter was dark, smoky, neutral in reaction, and contained blood and pus.

July 14th.—The patient having been anæsthetised, an incision was made from the vagina in the middle line through the base of the bladder. Growing from the mucous membrane of the base of the bladder to the left of the middle line was a mushroom-shaped growth. This was grasped with forceps and torn away. The fragments when put together formed a mass as big as a Tangerine orange. The base of the bladder did not seem more fixed than usual to surrounding parts, but owing to the elevation of the uterus (which was pulled up by the abdominal tumour) it could not be pulled down as usual, which made manipulation somewhat more difficult. Hæmorrhage was stopped by syringing with hot water. The incision was left open.

21st.—All pain has ceased. No trace of blood in urine.

31st.—Urine tinged with blood.

Aug. 28th.—Patient anæsthetised; cervix uteri dilated; interior of uterus examined, and found to be healthy. The edges of the wound in the bladder were pared and united by stitches in the usual way.

Sept. 5th.—Stitches removed, opening closed.

25th.—Circumference at umbilicus forty-one inches.

Oct. 9th.—A little blood and pus in urine; no pain. The lump formerly felt through the vagina at the base of the bladder is not now perceptible.

13th.—Discharged.

Mr. Jonathan Hutchinson, jun. (surgical registrar to the hospital), was kind enough to examine the fragments of growth removed. He reports as follows: "The growth was soft, and formed of a very great number of villous processes, so that it was difficult to obtain an extensive section. The processes, however, throughout were of similar structure—vascular fibrous projections covered with columnar epithelium (non-ciliated). Some were broad and short, the greater number of marked tenuity. From the latter the epithelial covering dropped off with great ease. Sometimes one long process appeared to join another. There was considerable round-cell infiltration of the thicker processes, as also of the base from which they grew. In addition to this (forming the most important feature of the tumour) were oval loculi filled with cells which could only be of epithelial origin. This so strongly suggests a tendency to infiltrate that the growth must be regarded as in all probability malignant."

The patient was readmitted on Jan. 15th, 1886. The urine now again contained much blood, and the patient was more anæmic. The circumference at the umbilicus was forty inches.

On the 19th the patient was put under ether, and the bladder opened from the vagina by a median incision, as before. The finger, introduced through the opening, felt a mass growing from the upper and posterior part of the bladder. This was grasped with forceps and torn away. Just as the growth had been removed, the patient's pulse and breathing stopped. The anæsthetic was withdrawn and a hypodermic injection of half a drachm of ether given. The tongue was pulled forward and an artificial respiration performed, and after this had been done the pulse and respiration returned. The wound was left open. The next day the pulse was small and the breathing hurried. There was no pyrexia.

Feb. 6th.—Edges of opening pared and united by sutures.

14th.—Sutures removed. Patient can retain urine.

March 19th.—Abdomen measures forty-one inches in circumference. Urine free from blood or pus.

27th.—Discharged.

The patient was admitted for the third time on Aug. 21st, 1886. From her leaving the hospital in March until the day of admission, there had been little or no blood in the urine. On that day hæmorrhage came on badly, and the patient therefore sought admission. She was extremely pallid and wasted. A mass could now be felt in front and to the left of the uterus.

On the 24th the bladder was opened as before, through the anterior vaginal wall. There were polypoid growths from the vesical wall, which were removed as far as possible; but there was also much thickening at the base of the bladder. The patient was given a dose of brandy before the administration of the anæsthetic, and another after the operation was finished. She did not seem greatly exhausted. She, however, gradually sank, and died about twenty-four hours afterwards.

The necropsy showed cancer of base of bladder; large multilocular cyst of right ovary, and small one of left ovary; secondary cancerous growths in liver and lungs; uterus healthy; kidneys healthy.

Remarks by Dr. HERMAN.—This case is thought worth publishing as an instance of a rare form of disease—primary cancer of the female bladder. Cancer of the bladder arising by extension of cancer beginning elsewhere is common. According to statistics collected by Féré,[1] the most usual place for primary cancer of the bladder is the base, and next most frequent the posterior wall. In this case the growth began in the base, and when this had been removed fresh growth took place from the posterior wall. As in most cases of the kind, hæmaturia was the most prominent symptom, and the anæmia produced by it the source of most distress and danger. The disease seems, from the history, to have commenced with cystitis: not a common mode of origin. According to Féré, it is rare for generalisation to take place, the local accidents usually causing death, and the average duration of the disease is from eighteen months to two years. Judged by this standard, this case was one exceptionally protracted in its course, and one in which treatment was unusually successful. That the growth, which began in the base of the bladder, was completely removed is evidenced by the fact that at the second operation the growth causing hæmorrhage was from the posterior wall, and not at the place from which a growth had been removed at the first operation. Each operation was temporarily successful in relieving the patient, by stopping hæmorrhage, and they prolonged her life sufficiently for generalisation to take place. The ovarian tumour was not removed, because when the patient was admitted it was thought better to postpone operation for it (as it was not causing distress) until the patient's general condition was better. As time went on it was found by frequent measurement that the tumour was not increasing, and the patient's condition never became what would be desired for a subject of abdominal section. The case illustrates the best method of dealing with intra-vesical disease in the female. It has been often advised and practised to deal with disease of the kind by dilating the urethra, and reaching the interior of the bladder through this canal. This method is far inferior to that of cutting into the bladder through the vagina. It gives less easy access to the disease, and brings with it danger of permanent loss of control over the bladder. If the bladder be cut into from the vagina in the middle line, no important structure can be wounded, the inside of the bladder can be easily reached, and anything required done. The wound made by an incision is easily closed by sutures, in this respect differing from the vesico-vaginal fistulæ which sometimes follow labour, and are due to loss of substance from sloughing. But where there is cystitis it is beneficial to leave the wound open, so that urine and any débris may escape through it. This conduces to the comfort of the patient and the restoration of the bladder to a healthy condition, and the wound will often heal without sutures. Except for diagnostic purposes, for which it is not necessary to dilate further than required to admit the finger, incision of the bladder from the vagina should always be preferred to dilatation of the urethra.

[1] Cancer de la Vessie. Paris, 1881. (Reprint from Progrès Médical.)

CHESTER GENERAL INFIRMARY.

LARGE STRANGULATED UMBILICAL HERNIA; OPERATION DEATH; NECROPSY.

(Under the care of Mr. TAYLOR.)

THE notes of the case are by Mr. Alfred Mann, visiting surgeon.

George M——, aged fifty-three, was admitted at 4 A.M. on Sept. 15th last, suffering from a very large umbilical hernia, which had been showing signs of strangulation some four or five hours before admission. The patient was too ill to give a very full account of his previous history, but it appears that he had suffered from a large umbilical hernia for sixteen years, and had never experienced any symptoms of strangulation before, although never wearing any kind of truss or support. He had been a butler in a gentleman's family for some time, but for the last year or two had had no settled occupation.

When admitted the patient was not vomiting, but had been doing so an hour or two previously. He had considerable pain in the tumour, especially when pressure was made at the margins. The tumour itself was very tense and nodulated, giving the idea of adhesions existing between the contents and coverings of the hernia. It measured 39 inches round its base and 18 inches across at its broadest part. Previous to admission the patient had had five-sixths of a grain of morphia injected hypodermically. The symptoms were not very acute on admission, and under the influence of morphia the pain became much less. At 9.30 A.M. he was seen by Mr. Taylor. He had then just vomited some greenish-looking fluid with a foul smell, but not stercoraceous; the pain also had become greater, and the tumour more tense. By 11 A.M. stercoraceous vomiting had occurred. A consultation was held at 12.30, and herniotomy decided on.

At 3.15 P.M. the patient was put under chloroform, and, with careful antiseptic precautions, Mr. Taylor made an incision about six inches long over the tumour a little to the right of the middle line. The coverings of the hernia were separately slit up on a director, and the sac opened. This was immediately followed by a protrusion of a portion of its contents. A small opening was unintentionally made in the intestine, which caused the ejection of a large quantity of dark, foul-smelling fluid. The neck of the sac was found, and notched downwards with a hernia knife. No attempt was made to return the intestines into the abdominal cavity, but great difficulty was experienced in returning them into the sac. It was only by squeezing out the fluid contents through the opening that had been made in the gut that this could be effected. The intestine having been returned, the sides of the intestinal opening were stitched to the abdominal parietes so as to form an artificial anus, and the wound closed with strong wire sutures. Hypodermic injections of morphia were given after the operation, but the patient soon had a return of the stercoraceous vomiting, and died at 11 P.M. The temperature was subnormal after the operation up to the time of death, which took place rather suddenly.

At the post-mortem examination held on the following day, all the intestine contained in the hernial sac was found to be very much inflamed, and numerous adhesions existed between the contents and the sac. A white line on the intestine showing where the constriction had taken place was found at a distance of three feet from the stomach. The sac itself contained all the ileum, cæcum, and ascending and transverse colon. All this mass of bowel had become bent over the narrow opening into the sac. No fæcal fluid had escaped into the abdomen or into the sac.

DUNDEE ROYAL INFIRMARY.

SUPPURATIVE GASTRITIS; DEATH; NECROPSY.

(Under the care of Dr. MACLEOD.)

WE are indebted to Dr. Wilson, house-surgeon, for the notes of the case.

C. S——, labourer, aged sixty-three, was admitted in the afternoon of Nov. 16th, 1887, suffering from a supposed first attack of acute rheumatism, brought on by cold. His previous health was good, but he was addicted to the free use of stimulants. About a fortnight before admission he had a rigor, followed by pains all over his body, and pyrexia; the joints of the arms and legs were subsequently affected.

The patient on admission was well nourished; arteries atheromatous. He was suffering from pains in the joints of the arms and legs, increased by movement, but not attended by swelling or redness. Apex beat of heart in fourth interspace, in nipple line; dulness normal. Heart sounds at apex: first sound slightly muffled, also at the base. Percussion clear all over the lungs. Pulse 92, soft; temperature 102·4°. Appetite fair. Tongue dry, and covered with a white fur. Bowels regular. Ordered five grains of iodide of potassium and fifteen grains each of bicarbonate of potash and salicylate of soda every hour for four hours in water.

Nov. 17th.—Morning temperature 98·8°. Urine: sp. gr. 1020, acid, and high coloured; moderate albumen. Dr. Macleod saw the patient for the first time about 11 A.M. He was perspiring freely, with an anxious expression of countenance. Heart sounds natural. Complained of pain in the joints of the arms and legs; no swelling or redness. His mind was confused, and he was labouring under a busy delirium, closely resembling delirium tremens; this was attributed to the salicylate, which was discontinued. Evening temperature 99·2°. Patient noisy and semi-delirious, calling out and trying to get out of bed; all the pains gone. At night the patient began to get very violent, shouting and moving himself about, with delusions and other symptoms of delirium tremens. Forty grains of bromide of potassium were ordered to be taken at once, followed by twenty grains every two hours.—8.45 P.M.: Still as excited as he was at 5.30. Ordered a quarter of a grain of morphia hypodermically.—10.30 P.M.: Noisy and delirious; getting out of bed. Tied in bed, and a third of a grain of morphia given. Went off to sleep in about half an hour, and continued quiet during the night.

18th.—At 2 A.M. the patient was breathing naturally as if in a sound sleep. About 7 A.M. the nurse noticed that his breathing was noisy and stertorous, with rattle in the throat. On examination, pupils were found contracted; no response to stimulation either of the eye or skin. Pulse 132; respiration 28; temperature 104·2°. Rigidity of limbs on right side; left arm and leg flaccid. His head was ordered to be raised and an ice-cap applied.—8.30 A.M.: Temperature 106·2°; pulse 144; respiration 36. Condition much the same. Breathing stertorous. Pupils contracted and fixed. About fifteen ounces of blood removed from arm by venesection. Died at 10.15 A.M.

Necropsy, by Dr. Stalker, pathologist.—Nothing abnormal found in brain. Recent lymphy effusion between arachnoid and pia mater. Heart normal in size; one pericardial adhesion. Narrow liver. A string an inch long from the parietal and visceral layer on left ventricle, also recent vegetations on aortic cusps. Kidneys and spleen normal. Stomach greatly thickened all over greater curvation and round pylorus, where the wall was about an inch thick. On section the stomach wall was found to be divided up into spaces full of yellow pus, between the muscular layer and submucous membrane. Mucous membrane apparently healthy.

Remarks by Dr. MACLEOD.—Gastritis phlegmonosa, or diffuse suppurative gastritis, is a very rare affection almost impossible to diagnose, and very few text-books contain any reference to the disease. Ziemssen, in his "Practice of Medicine," relates one case, the symptoms being pain in the stomach, gradually increasing, vomiting, diarrhœa, general prostration, delirium, ending in coma. In the present case all these symptoms were absent, with the exception of delirium, which ended in coma, and closely resembled delirium tremens. The symptoms resembled an attack of acute rheumatism; and the busy delirium I found the patient suffering from—the only time I had an opportunity of examining him—I attributed to the action of the salicylate of soda, which I observed in another case of rheumatism. Post-mortem examination, however, disclosed the true state of matters, and the symptoms considered to be rheumatic were doubtless due to pyæmia. The patient was intemperate in his habits. In the absence of post-mortem examination, the case would have been described as one of acute rheumatism, ulcerative endocarditis, and hyperpyrexia.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Fatty Degeneration of Heart from Intra-abdominal Pressure.—Arsenic Cancer.—Stricture of Intestine following Tubercular Ulceration.—Avian Tuberculosis.—Syringomyelia.—Ulcerative Colitis.

AN ordinary meeting of this Society was held on Tuesday last, Sir James Paget, Bart., President, in the chair.

Dr. BEDFORD FENWICK read a paper on Cardiac Degeneration due to Abdominal Disease. He related the case of a woman aged forty-five, who had been married twenty-two years. She presented a uniformly distended abdomen; the cardiac sounds were dull. The ovarian tumour was of great size and solidity, and weighed twenty-two pounds after all fluid had been discharged. The operation wound healed by first intention, but on the eleventh day the patient became very ill and peritonitis set in, followed by death on the twelfth day. The heart muscle was pale, yellow, soft, and friable; the wall of the right ventricle was very thin, but the wall of the left ventricle was of natural thickness. The microscopic sections were made by Dr. Norman Dalton, and showed fatty infiltration and degeneration of the heart muscle. He believed that such a condition could cause rapid death and collapse, and, in fact, was the pathology of twenty-two fatal cases in which the general condition was well marked. He suggested that the effects of direct pressure were the probable causes of the degenerative change, which was proportional to the duration and size of the abdominal mass; such a physical explanation being obvious, there was no need to invoke more obscure agencies. The majority of cases occurred under the age of fifty, and yet fatty degeneration of the ordinary kind was most frequent in males above that age.

Mr. JONATHAN HUTCHINSON made a communication on Arsenic Cancer. The suggestion was made that the administration of arsenic for many years in full doses, as given in cases of psoriasis, could lead to the development of epithelial cancer, having some peculiarities. He showed a drawing of a foot which at first sight might have been thought to be a perforating ulcer, but there was no sinus and no other evidence of its being of this kind. Excision was practised, and the tissues treated with chloride of zinc. It was proved by microscopic examination that the disease had many of the characters of epithelial cancer. There were numerous little corns on the sole of the foot and in the palms of the hand, and undoubtedly due to the use of the arsenic. Microscopically, there was nothing definite as to its being an epithelial cancer. A case was mentioned which occurred in a member of the medical profession; the rough condition of the palms and soles, with the association of soft corns, was well marked. This condition did not develop as a papillary form. After suffering for some years from this condition of the palms and soles, there appeared on the front of the wrist of one hand an ulcer having some of the aspects of a syphilitic sore, but this was negatived on good evidence. The tumour was removed, but it grew afresh on each separate occasion. A course of anti-syphilitic treatment did no good. Amputation of both hands was performed. The patient lived for eighteen months, and died with epithelial cancer in the lungs, supra-capsules, kidneys, and a rib; these had the characteristic epithelial structure. Such a case tended to prove that arsenic could produce the palmar condition, and perhaps also the cancer. Another case had no skin disease whatever until he took arsenic for a cancerous growth in the neck; arsenic was taken in doses of twelve minims, three or four times a day; a muddy and thick condition of the skin appeared. In another instance, in a female child with pemphigus, where arsenic was prescribed in large doses, a cancer developed on the skin over the crest of the ilium and under the skin of the thigh; it ulcerated, and the patient died at the age of

twenty-five. Another instance was noted by Mr. Waren Tay, in a clerk aged thirty-four, who had psoriasis and developed a cancerous mass on the scrotum of epithelial sort after taking large doses of arsenic. Altogether, the cases, he thought, went to show that arsenic might and could be a powerful factor in the development of cancer in certain cases.—Dr. EDMUNDS said that in the fens of Cambridge arsenic was taken in large doses for ague, and yet cancer was rare. There was no ague, but cancer was prevalent in Norfolk, where arsenic was presumably not used. He thought that coincidence would explain Mr. Hutchinson's cases.—In reply to a question, Mr. HUTCHINSON said that the arsenic was stopped in the case of the medical man as soon as it was suggested as the cause of the cancer.—Dr. HADDEN said that skin eruptions produced by arsenic were not mentioned in text-books.—Mr. HARRISON CRIPPS said that further evidence was wanted. In the first case, resembling perforating ulcer, the microscope showed that the disease was not epithelial cancer. The psoriasis in the medical man might be regarded as the cause of the cancer from chronic irritation.—Mr. MAKINS suggested that information from Styria would be of value.—Mr. F. S. EVE said that epithelial cancer took on a peculiar form in the palms and soles. In workers in cobalt mines lympho-sarcoma of the lungs and submucous tissue developed. He could perceive no reason why arsenic should not in a similar way set up carcinomatous disease.—Sir JAMES PAGET considered that arsenic might have some influence in accelerating or producing cancer. The whole characteristics of the disease should be taken into consideration in determining its nature; the microscope could not always be trusted in diagnosis. The evidence went to show that arsenic had a very definite influence in the causation of the cancer.—Mr. JONATHAN HUTCHINSON, in reply, said that Dr. White of Harvard University believed that the case was one of psoriasis-cancer. It was exceptional for psoriasis to affect the palms of the hand, and yet arsenic produced the rough and horny condition of this region. In the diagnosis of cancer he would not trust to microscopical evidence. In the case of the medical man continental authorities said the disease was syphilis, so that the absence of microscopic evidence was not conclusive, because in this case at least cancer was certainly present. Arsenic could certainly cause herpes zoster and arsenical eczema; it did not produce symmetrical eruptions.

Mr. FRED. TREVES showed a specimen of Tubercular Stricture of the Colon, removed from the body of a boy aged fifteen years, who was admitted into the London Hospital with the symptoms of chronic intestinal obstruction of six months duration; diarrhœa, colic, and gradually increasing constipation were the chief symptoms. The patient became worse and developed peritonitis, which was treated as a last resource by enterotomy and the formation of an artificial anus in the middle line. At the necropsy the left lung showed caseous deposits at the apex. The stricture existed at the end of the ascending colon, and was of a dense circular fibrous character. Certain characteristics were sufficient to diagnose it as a tubercular ulcer: it was entirely circular, and in vertical direction measured 1½ in.; the contracting medium was the mucous membrane, and this membrane was dissected from the submucous tissue, with a formation of cloacæ, and fenestræ, and tags, fifty in number, some flattened and sessile, others branched somewhat similar to those resulting from undermining tubercular ulcers of the skin of the neck. The submucous tissues appeared to be the chief seat of the disease. The disposition to the formation of stricture was absent if the whole of the mucous membrane were destroyed. Tuberculous disease of this sort usually had very little disposition to form a scar.

Mr. W. SIBLEY read a paper on an Epizootic of Avian Tuberculosis in a farm in Surrey, and showed specimens of the various organs diseased. Much caseating matter was expelled from the bowel, after having been discharged into its lumen from the diseased walls of the intestine, and thus left behind large pouches. The lesions presented the typical forms of bacilli. The disease generally appeared when the birds were about two years old. The whole of the abdominal organs were effected. Mention was made of one such pouch connected with the crop which attained the size of a pigeon's egg. Subpleural nodules were also present, and the larynx and trachea were diseased. Vertebral caries and caseating cervical glands were occasionally observed. Bacilli, apparently identical with those found in human tuberculosis, were present in most of the affected organs. The nodules appeared to have little tendency to break down, but the growths tended to spread and to caseate, forming relatively large tumours. The disease was apparently an example of hereditary transmission.

Dr. CHARLEWOOD TURNER exhibited a specimen of Syringomyelia in the spinal cord of a female, aged twenty-three, who died in the London Hospital from a severe burn caused by falling into the fire during a fit. She had atrophy of the upper limbs, which had been developing for twelve months. There was a large central cavity extending from the medulla oblongata to the upper end of the lumbar enlargement, and a smaller cavity in the right posterior cornu in the lower part of the lumbar region and conus. The cervical enlargement was expanded by a large central cavity with processes along the posterior nerve roots to the surface of the cord. In the dorsal region the cavity was chiefly on the right side of the cord and was smaller. In the mid-dorsal region it was divided into two separate channels in the posterior grey matter of each side. Below, it became again a single channel, in part symmetrical, in part on the right side. When the cavity was central it was divided by an antero-posterior median septum of membrane. The lateral ventricles of the brain were dilated, the left anterior and posterior cornua more so, in correspondence with the predominance of the spinal lesion on the right side, emphasising the observed association of syringomyelus with hydrocephalus. Referring to Leyden's suggestion that hydromyelus arises from unobliterated portions of the posterior limb of the embryonic central canal, Dr. Turner expressed the opinion that the spinal cavity in such cases originated in dilatation of perivascular spaces in the neuroglia—(1) because of the limitation of the lesion, in part or wholly, to the cornua. The division of the channel into two lateral portions, and the presence of a median membranous septum dividing the channel where centrally situated, were indications of the origin of the cavity in the posterior grey cornua in the central extension rather than the contrary course; (2) because the ventricles of the brain, as in a sense perivascular cavities, are, physiologically and functionally, in correspondence with the perivascular spaces in the cord, and become distended in hydrocephalus through serous exudation from the vessel in excess of the outlet of escape; and the watery character of the fluid in syringomyelus shows that this is similarly due to exudation, whereas distension of a closed epithelial tubule in the connective tissue of the cords, though intelligible as a result of the formation of some mucous or colloid substance from the epithelial surfaces, is not intelligible as a result of exudation from the vessel.

Dr. HALE WHITE showed a specimen of Ulcerative Colitis from a man who died with a history of diarrhœa, melæna, vomiting, abdominal pain, and wasting, of a few months' standing. No cause could be found. At the necropsy it was discovered that there was ulceration of the whole of the large intestine, beginning at the cæcum and extending to within four inches of the rectum. The ulceration was universal, leaving, however, irregularly shaped islets of swollen congested mucous membrane. The edges of the ulcer were sharply defined; the floor consisted of exposed transverse muscular fibres. There was no attempt at repair or perforation, no peritonitis or tubercle. The ulceration was least marked in the cæcum and rectum. Dr. Hale White pointed out that, although this condition was occasionally met with, nothing was known as to its origin beyond the vague speculation that it arose in either a follicular or catarrhal ulcer; nor was anything known as to its cause, for it was certainly distinct from dysentery. It appeared to be invariably fatal, and its presence could not be detected during life with any certainty.

The following card specimens were exhibited:—

Mr. MAKINS: Primary Cancer of Bladder.

Mr. BULL: Bladder from case of Prostatectomy and Suprapubic Lithotomy.

Dr. HEBB: (1) Tricuspid Disease—five specimens; (2) Fowl Tuberculosis; (3) Bacilli in Diphtheria.

Mr. F. S. EVE: Ranula illustrating origin from Nuhn's Gland.

MEDICAL SOCIETY OF LONDON.

Cardiac Failure in Pulmonary Obstruction.—Chyluria.

AN ordinary meeting of this Society was held on Dec. 5th, Dr. J. Hughlings Jackson, F.R.S., President, in the chair.

Dr. THOROWGOOD, in order to keep his paper on Cardiac Failure in Pulmonary Obstruction within due limits, confined his observations to the best methods of assisting a weak and

failing heart under the difficulty of pulmonary congestion and obstruction. It was quite true, as said by many authorities, that cardiac failure was the great cause of death in pneumonia and many other respiratory diseases. Dr. Thorowgood did not agree with Felix Niemeyer that stimulation of the heart must increase the amount of œdema already existing on the alveoli of the lungs in pneumonia; but he did think, from what he had observed, that stimulants were often given too freely and too early in the course of the disease, to the neglect of other remedies. This fact was brought out most in cases of bronchial or catarrhal pneumonia, a disease in which respiratory insufficiency is the principal cause of death. Too much stimulant tended to gorge the right heart with blood, and so did but increase the respiratory distress. In a case narrated, a child aged seven years had a severe attack of catarrhal pneumonia supervening on whooping-cough. When seen she was livid in the face, hardly conscious, and the lungs were full of coarse râles. Champagne and brandy had been freely given, with no benefit. All stimulants were withdrawn, and under the influence of small doses of tartarated antimony in conjunction with sulphate of magnesium, the child made a good recovery. Dr. Thorowgood fully admitted the value of alcohol as a cardiac stimulant, but in cases of bronchitis and pneumonia he considered it important to begin with such a medicine as tartarated antimony with a saline, the intention of this plan being to relax the capillaries, promote secretion, and so lessen the labour entailed upon the heart, the principle being much the same as when we sought to aid a heart failing in an attack of angina by dilating the capillaries with nitrate of amyl. No remedy would equal the tartarated antimony in repeated small doses. The earlier it was given the better; but even in advanced cases it might often be employed with striking effect. It seemed to have, as Stokes of Dublin once said, a specific action over the capillaries of the lung. In small doses it might be stimulant, while in excessive doses it might paralyse, and so cause that congestion of the lungs which Majendie had observed in animals poisoned by the drug. As direct respiratory stimulants, belladonna, nux vomica, and carbonate of ammonium were remedies of proved and undoubted value.—Dr. ROGERS had seen benefit follow the administration of small doses of tartar emetic combined with iodide of potassium.—Dr. ROUTH spoke of the value of nitro-glycerine given with carbonate of ammonia as a cardiac stimulant. He referred to Claude Bernard's treatment with intra-tracheal injections, which went to show the marked absorbent power of the pulmonary mucous surface.—Dr. S. H. HABERSHON said that the rapid effect of strychnia as a motor stimulant was brought out by hypodermic injection, and he alluded to a case of double pneumonia which was greatly benefited by the subcutaneous administration of 1-60th of a grain of the acid sulphate.—Dr. THOROWGOOD, in reply, objected to venesection on the ground that its effect was only temporary. He had found that strychnia prevented pulmonary œdema.

Dr. STEPHEN MACKENZIE read a paper on Chyluria, with remarks on the *rôle* of the Mosquito, and a description of a Nematode Worm in the Urine, mistaken for the Filaria Sanguinis Hominis. The author began by describing a case—that of a gentleman from the West Indies, who had suffered from chyluria since 1876 on and off, and possibly his disease dated much further back, to the age of nine or ten. His urine when first passed was of a rich chocolate colour, but when the blood corpuscles subsided it was left of a rich creamy-milk appearance. It was acid, sp. gr. 1025, contained 0·6 to 0·7 per cent. of albumen, and was free from sugar. It contained no casts. When shaken with ether the suspended fatty matter was removed. After taking benzoate of soda in 30-grain and later in 45-grain doses, it quickly became quite clear. When his blood was examined by day no filariæ were found, but when examined at night living embryo filaria sanguinis hominis were always present. The filariæ were not deceived by a London fog into entering the general circulation in the day-time. He had suffered from what he called "intermittent fever," which Dr. Mackenzie pointed out was probably filarial and not malarial. He also had some enlarged vessels in the groin, which, it was conjectured, were dilated lymphatics—"nævus lymphaticus"—and were probably due to a parasitic habitation in this region. The leaking of the lacteals into the urinary tract probably took place in the kidney in this case. Passing on to the consideration of the *rôle* of the mosquito, the author pointed out how this insect fulfilled the necessary requirements of an intermediary host, by its geographical range, and by its habit of feeding at night when the filariæ were in the blood. It had, he said, been clearly demonstrated that only a certain variety of mosquito was capable of nurturing the filaria. It had been urged that there was no necessity for a suctorial insect, as the embryos could escape with the urine. It was shown, however, by the author that the urine was an unfavourable medium for the embryos, and therefore an unlikely channel for their distribution. He next briefly described the changes taking place during the stay of the filaria in the mosquito, and demonstrated most of these changes from preparations sent by Dr. Manson. Lastly, he described a nematode worm that had been found in the urine in two cases, and mistaken for the filaria sanguinis hominis. He pointed out that it was a bisexual mature worm about 1-30th of an inch long by 1-500th of an inch broad. It was probably a variety of Dujardin's species, Rhabditis, but how it got into the urine he had no explanation to offer. In conclusion, he pointed out how practically impossible it was for cases of chyluria occurring in this country to be due to filaria sanguinis hominis, or for the latter to, in any circumstances, get into the urine or blood of persons who had never left this country.—Dr. THEODORE ACLAND said that when in Egypt he met with a case of hæmaturia caused by a nematode worm, which he was unable to identify.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

A MEETING of the above Society was held on Friday, Nov. 18th, Dr. ALFRED HILL, President, in the chair.

Dr. W. N. THURSFIELD read a paper entitled, "Pasteur's System of Preventive Treatment of Hydrophobia," of which the following is an abstract:—A medical officer of health was liable, if not *ex-officio*, at least by custom, to be called upon at any moment to give responsible advice on the important question, "Should an individual bitten by an animal, presumably rabid, undergo the Pasteur system of preventive inoculation?" and his object in the following communication was to endeavour to contribute some evidence towards arriving at a sound conclusion on this question. Before endeavouring to show how far statistical evidence of results justify confidence in the Pasteur system of treatment, he thought it would be well to remove certain false impressions and misrepresentations which are constantly repeated with reference to the work at the Pasteur Institute, and he noted with regret that in the recent report of the evidence before the Select Committee on Rabies of the House of Lords, several of these misstatements reappear. To the statement so frequently made, that any person offering himself for inoculation at the Pasteur Institute was received and treated without any proof whatever that the dog was rabid, he could give a most emphatic denial. In every case satisfactory evidence that the dog was rabid is required, and wherever practicable patients were requested to bring or forward the head of the dog. He had himself seen a patient apply with a dog-bite, but there being no evidence that the dog was rabid, he was refused inoculation, and treated as for an ordinary bite with local applications. In the case of each patient, before commencing the inoculations, full particulars were taken, and a consultation was then held by the staff of the Institute as to a line of treatment, which was separately prescribed for each patient on his allotted page in the case-book. In arriving at this prescription, the age and diathesis of the patients, the site, extent, and nature of the bite, and other matters were considered, and the number, date, and strength of the inoculations were then prescribed, subject to variation or extension if circumstances should make it desirable during the course of treatment. The utmost care and most scrupulous precautions were taken to preserve an aseptic condition, both of the inoculating fluids and of the instruments employed. The syringes were of glass, silver-mounted and with needle points, and new syringes were used for each series of inoculations. After each separate inoculation the needle of the syringe was plunged into oil heated to a temperature above boiling water, by means of a chloride of calcium bath, and before being again plunged into the inoculating fluid the needle of the syringe was passed through sterilised filter paper, and after each series of inoculation the syringe was at once sent back to the maker. These precautions were taken in order to have all its absorbent portions removed and thoroughly cleansed and refitted. Dr. Thursfield then came to consider

a most important point, and one which, and not the real merits of the case, was at the bottom of the most active opposition to the Pasteur system of treatment and of the abuse showered on those who ventured to countenance the system. He alluded to the question of cruelty, and he would endeavour, from his own experience, to show on what a baseless foundation this idea of cruelty, at the Pasteur Institute rests. The practical work of the Pasteur Institute consisted: 1. Of inoculations of rabbits with rabid matter for the preparation of inoculating fluids for treating human beings bitten by rabid animals. Three rabbits were daily so treated. 2. Test inoculations, chiefly performed on guinea-pigs, with a view to test whether animals which had been killed as presumably rabid were really so. 3. Collateral test investigations as to the power of inoculating fluids to prevent the development of rabies &c. The first two proceedings were the only ones absolutely essential to the practical working of the Pasteur system as at present developed, but it was to the third that was due the foundation of the whole system. The inoculations were either intra-cranial or subcutaneous. The intra-cranial inoculations were invariably carried out under complete anæsthesia, and with precise antiseptic precautions. As much care was in every case taken, both as regards anæsthesia and antisepsis, in the case of the animals experimented on, as was done in the case of a human being in the best-ordered London hospital. In every case that he saw, the wound healed by first intention, and as soon as the animal had recovered from the effects of the chloroform, in a quarter of an hour or so it would generally eat. As regards the time occupied by the whole proceedings involved in the operation of intra-cranial inoculation, he timed a number of operations, and found that the average time from the moment the animal was placed under restraint until it had recovered from the anæsthesia and was released was as nearly as possible five minutes, of which between ninety and one hundred seconds were taken to produce complete anæsthesia, and the time occupied by the operation itself from the first incision till the wound was sewn up averaged two minutes and ten seconds. As regards the operation of subcutaneous inoculation, although technically vivisections, little pain was involved. This was evident from the fact that the only restraint necessary in dogs was for an attendant to hold the animal between his knees, merely restraining its fore-paws with his hand with occasionally the finger and thumb of one hand placed round the mouth. The demeanour of the dogs generally seemed to indicate quite as much pleasurable anticipation of the lump of sugar which always followed the operation as impatience of the restraint, and he could state most positively that he had seen a dog wag its tail during the whole proceeding. As to the after-results of the inoculations, it was certainly painful to see an animal suffering from purposely induced disease. To take the extreme case of the rabbits, where fatal rabies is the invariable result of the operation, and three of which were inoculated daily, they commenced to sicken on the sixth day after the operation, and died on the ninth. As a matter of fact, they did not seem to suffer much pain. The first symptom is apparent dulling of the mental faculties accompanied by paralysis of the extensor muscles of the hind legs. The paralysis and the dulling of the mental faculties proceeded side by side, and the rabbit died comatose and with general paralysis. He had so far endeavoured to show that as regards careful and conscientious work, carried out on a thoroughly scientific basis, the Pasteur Institute was in every way worthy of confidence. For evidence as to the success obtained they must go to statistics. Statistics there were in abundance, not only from the Pasteur Institute in Paris, but from the Anti-rabic Institutions in Russia, several of which had now been some time in full work; but to properly consider these statistics would necessitate the critical examination of so many points and so many distinct cases that a much larger time than that at present at his disposal would be insufficient. He should therefore confine himself to the statistics of the present year, and chiefly to those of the first six months of the year—that is, up to the end of June; this would ensure that a minimum period of four months would have elapsed since the bite in each case, and in the large majority of the cases a period of over six months. This would cover the ordinary period of incubation, but not the exceptional, though by no means rare, cases in which the incubation was prolonged. From Jan. 1st to Sept. 30th, 1887, 1392 persons had been inoculated at the Pasteur Institute. These 1392 persons had been bitten by the following agents: Dogs, 1294; cats, 74; wolves, 11; pig, 1; donkeys, 4; cows, 3; calves, 2; horses, 2; ox, 1; tame fox, 1; jackal, 1; mule, 1; human being, 1. In 1182 of the persons treated the rabid condition of the animal causing the bite had been shown, either by experimental inoculation, by the fact of some animal or person bitten at the same time developing rabies, or by the certificate of competent veterinary authorities. In the case of the remaining 210, the animals had been suspected of being rabid from symptoms exhibited during life. From January 1st to June 30th of the present year 954 cases were inoculated, and in the case of 805 of these the rabid condition of the animals causing the bite had either been proved beyond question, or certified by qualified veterinarians. Of the above 805 bites, 581 were inflicted direct and without the intervention of clothing, and 69 were on the head or face. A large proportion of the fatal cases were bitten on the face. Up to Oct. 15th, 1887 (after which he had no information), so far as is known, 15 of the above cases had developed hydrophobia, and, taking the percentage on the 805 persons only, this gave a result of less than 2 per cent.; but some of the cases should not fairly be included, having commenced treatment too late. Of the above 15 cases, 3 were British subjects, who had commenced the treatment on the twelfth, eleventh, and sixth day after the bite respectively, and 4 were Spanish subjects, who had commenced the treatment on the thirteenth, thirteenth, eleventh, and twenty-eighth day after the bite respectively. The remaining 8 cases were French subjects, who as a rule commenced their treatment in good time. Now, he was by no means prepared to say that the treatment was inoperative unless commenced before ten days had elapsed, but he attached much value to Mr. Horsley's opinion, that if the inoculations were commenced after the tenth day they were probably too late, and it was certainly not an unfair use of statistics to exclude all such cases. This would bring the mortality down to 10 in 805 cases selected as bitten by animals declared to be rabid on the best authority, or just 1·2 per cent.—In the discussion which ensued, the President, Drs. Drysdale, Saunders, and Renner, Mr. Wynter Blyth, and Mr. Shirley Murphy took part, and Dr. Thursfield replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Hour-glass Contraction of the Stomach.—Phlegmasia Alba Dolens.

THE opening meeting of the Pathological Section of the Academy was held on November 4th, when the President delivered an address on Tetanus.

Dr. FINNY exhibited a specimen of Hour-glass Contraction of the Stomach, occurring in an organ which was the seat of several ulcers. The following were the clinical history and the morbid appearances. Mary M'G——, a domestic servant, aged twenty-nine, was admitted into Sir Patrick Dun's Hospital on May 13th, 1887, in a state of collapse and in great pain, which was referred to the lower part of the abdomen. After reaction had set in, under appropriate treatment, she vomited once, and the rejected matter consisted of tea and milk, but contained no blood. The urine was drawn off, and found to be free from albumen and indican. All her symptoms were those of acute peritonitis from perforation. Death ensued eight hours after admission. Her history was to the effect that she had enjoyed good health up to three weeks previously; but, beyond some slight dyspepsia, she was able to continue her duties as a domestic servant up to the day before admission. The post-mortem examination, made thirty-six hours after death, displayed acute general peritonitis, with flaky lymph and sero-purulent fluid, while the stomach was found to be the seat of recent inflammation, as well as of old and firm adhesions to the liver, spleen, pancreas, and diaphragm. At first sight there seemed to be two stomachs, or one with a very dilated duodenum; and this appearance was due to a transverse constriction of the stomach, nearer one-third to the pylorus than to the cardia. On the anterior surface of the cardiac half of the organ, not far from the greater curvature, the origin of the general peritonitis was seen in the existence of a circular, sharply defined, perforating ulcer, the size of a threepenny-piece. On laying open the stomach it was found to have been the seat of several ulcers—(1) that referred to on the anterior wall, which on the mucous aspect measured a sixpence, and had the punched-out characteristic appear-

ance; (2) a firmly cicatrised, circular ulcer on the posterior wall, near the lesser curvature—which was not in a state of activity—whose floor consisted of the pancreas, to which it was adherent; (3) a small ulcer in a stage of activity lower down in the posterior wall; and (4) an oval ulcer extending three-quarters of an inch from the lesser curvature, transversely to the long axis of the stomach, and in an active stage of destruction of the mucous and part of the muscular coat. This ulcer ran into the circular constriction, which divided the stomach into two unequal bags. The constriction, which was half an inch wide, narrowed the organ so as to admit but three fingers, and had all the appearance, from external examination, of the pylorus. The lesser curvature was not dimpled or much marked, but towards it the greater curvature was drawn at this spot, so as to make two bags of the stomach. Its outside was thickened by old lymph, while on the inside the rugæ of the stomach seemed to run into it, and at its cardiac side was the ulcer referred to as No. 4. Dr. Finny discussed the pathological origin of the constriction, and remarked on its want of agreement with the features depended upon by Dr. W. R. Williams as distinctive of congenital hour-glass contraction. He alluded to the rarity of cases of this deformity of the stomach, the greater number having been discovered in the dissecting-rooms. He also laid stress upon the following, as exemplified by his specimen—(1) the comparative greater danger of an ulcer situated with anterior wall; (2) the coexistence of three ulcers in a state of activity; (3) the possibility of relapse; (4) the encouragement to treatment to be derived from the fact that so many ulcers—about half of those recorded—have been discovered in a state of cicatrisation. There was no history of food having been taken immediately before the occurrence of the great pain. The woman had never complained of any pain in the stomach, or other marked gastric symptom, until three weeks before her admission. She was doing her work as a servant when the sudden occurrence of pain obliged her to seek relief. The case was an example of ulcers painlessly eating their way through the walls of the stomach, and ending in perforation at short notice. The woman had vomited before she came into the hospital, and in consequence of the small size of the opening caused by the fatal ulcer nothing was extruded through it.

Professor BENNETT submitted a specimen of Phlegmasia Alba Dolens. The patient, a girl of fifteen years, was admitted on Sept. 30th, 1886, into Sir Patrick Dun's Hospital, and remained there until June 27th, 1887, when she died. When admitted she had phlegmasia alba dolens in the whole of the left leg, which was distended with white œdema. She was extremely emaciated and anæmic, and her œdemic leg was in strong contrast with the rest of her body. There was great difficulty in assigning any cause for the ailment, pregnancy and parturition being entirely out of the question. She suffered from great gastro-intestinal irritation, which was complicated with vomiting and diarrhœa, accompanied with pain. Three weeks after her admission œdema of the right limb commenced, and the condition of the right leg soon became the same as that of the other. Diagnosis then became easy, it being apparent that there was obstruction of the femoral and iliac veins, and that it had extended up the involved vein on the right side. Clinically the case was an extremely easy one to read, and before the swelling of the right limb occurred it was prognosticated that it would occur. The femoral vein could be felt hard and distended on the left side, and when the œdema on the right side occurred the vein on the opposite side was as firm and hard under the finger as a cord. After this, without any material change in the general system, collateral circulation of the venous system of the abdomen began to establish itself, with a reversal of the blood currents, these being directed towards the thorax instead of the groin. There was then some slight clearing up of œdema, and just a prospect of recovery. Still the gastro-intestinal irritation remained. Then suddenly there came an accession of symptoms, indicating uræmic poisoning. Then there was rapidly developed extreme œdema of the whole body, which pitted rapidly; and finally, with uræmic phenomena, death took place. He would now show what they had guessed at as the cause of the disease, but could not distinguish with certainty. There were two great cylindrical patches, close to each other, in the lower portion of the small intestine, of tubercular ulceration of the intestine, with a great series of enlarged glands infiltrated with tubercular matter occupying the mesentery. There was no tuberculosis of the lung; but the gastro-intestinal phenomena appeared to be produced entirely by the condition of the small intestine. The femoral veins and tributaries were occluded. The vena cava inferior was a complete fibrous cord, shrunk and flattened out. When it was traced up between the kidneys there was found a large, firm thrombus, which had already undergone calcification. Then came the most interesting point in the case. On the surface of that calcified thrombus, and projecting up the occluded vein, with its base between the veins of the kidneys, was a fresh, newly formed thrombus superadded upon it. These thrombi had extended into the renal veins, which were completely occluded in their paths towards the kidneys; and the greater number of the small branches in the substance of the kidneys were also absolutely and entirely occluded. By the second deposit of coagulum on the basis of the old thrombus, and its recent extension into both the renal veins, the fatal issue was brought about, accompanied by the uræmic phenomena of suppression of the urinary secretion, and the rapid development of general anasarca, which was absent in the earlier stages of the case.—Professor PURSER said the chief point of interest appeared to be, what effect the thrombosis of the renal veins produced on the secretion of urine. The idea generally held was that the quantity of urine secreted depended on the pressure of the blood on the renal capillaries. It was not improbable that the diarrhœa was due to degeneration of the bloodvessels—amyloid degeneration; and, if so, the condition of the kidneys would not have been of such a kind as to make the change in the circulation of any value, one way or the other, as regarded the secretion of urine.

The Section then adjourned.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the general meeting held on Nov. 4th, Mr. Edward Atkinson, President, in the chair, the following papers were read.

Dr. MYRTLE related two cases illustrating the occasional great difficulty of Diagnosis in the Earlier Stages of Malignant Disease. Case 1: A gentleman aged fifty-four, first seen on Aug. 4th, complaining of a sharp pain at the anus. Examination revealed nothing except a hæmorrhoidal condition, not severe. On Sept. 3rd, he was again seen. Pain worse, associated with severe neuralgic pain in the penis, diarrhœa, and marked deterioration of the general health and appearance. At a consultation, nothing beyond a ballooning of the rectum and laxity of the mucous membrane could be detected by the most careful examination. On the 20th he was seen by a distinguished London surgeon, who diagnosed inflammation of the cellular tissue between the rectum and prostate, and gave a good prognosis. Two days later he was much worse, and another examination revealed a hard nodulated mass high up in the rectum. The patient died on the following day, seven weeks after he was first seen by Dr. Myrtle. Case 2: The patient twelve months ago complained of a peculiar sensation at the lower end of the sternum on swallowing, and of shooting pains about the anterior chest wall, having special difficulty with certain acid fluids. For a time relief was obtained by the administration of cocaine in one-eighth of a grain doses before meals, but soon the dysphagia came on again, grew steadily worse, and hæmorrhage supervened. He was subsequently at various times examined in consultation by physicians and surgeons, and a throat specialist of the highest eminence, whose diagnosis included spasm, neuralgia, a small patch of inflammation and aneurysm of the aorta; and it was not until quite late in the case that a growth occluding the œsophagus and a mass occupying the cardiac end of the stomach were demonstrated. At this time there was complete obstruction of the gullet, and the patient was kept alive for twenty-six days longer by rectal feeding.—Dr. CLIFFORD ALLBUTT referred to the case of a patient who had been in a railway accident, and who was sent for an opinion by the solicitors, who were preferring a claim for damages. The main symptoms since the accident were: steady, continuous emaciation, colicky pain in the hypogastrium, and irregularity of the bowels. There was found upon examination a nodulated mass of malignant disease high up in the rectum. But in these apparently latent cases an important

point is the cachexia and wasting, being inconspicuous or absent in cases of spasm, inflammation, or neurosis.—Dr. EDDISON said that in his experience the surgical treatment of malignant stricture of the œsophagus was eminently unsatisfactory, the mortality of gastrostomy being almost prohibitive.

Dr. SCOUGAL read the case of a woman who after a normal labour was seized on the ninth day with pain on the right side of the head and numbness in the first three fingers of the left hand. This was followed by incomplete paralysis of the left side, with transient dysphagia. She gradually became comatose, and the loss of power more marked. Post mortem, a clot was found in the middle cerebral vein; none in any of the arteries or sinuses.—Dr. BRAITHWAITE, who had seen the case, had been unable to arrive at a satisfactory diagnosis. He remarked on the great variation in symptoms in such cases, and referred to a case recorded by Dr. Fordyce Barker, where a clot in the middle cerebral artery had been followed by no symptoms.

Professor DE BURGH BIRCH read a paper on the Analysis of Fluid which was secreted by the Gall-bladder, which had been opened by cholecystotomy in two cases. The fluid was thin and watery, containing no bile elements, but with a faint diastatic power. The ferment could not be isolated, but seemed to be held in the mucin, and was destroyed by acetic acid. The cases had been under observation for many months, and the fluid on every occasion presented the same characters.

Dr. ALLAN showed a case of Leucoderma in which the patches were symmetrical.

Dr. BARRS exhibited a case of Multiple Neuritis. The patient was a young girl, in whom the condition was associated with enlargement of the spleen and marked anæmia.

Mr. WARD showed a case of Generalised Non-ulcerative Gummata of the Skin, of six years' duration.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Nov. 10th, Dr. de Bartolomé, President, in the chair.

Rupture of the Trachea, followed by general Emphysema and Asphyxia.—Mr. GARRARD related this case. A girl aged eight fell on a sharp-edged slate hanging round her neck, bruising the front of the neck. She began to swell at once with emphysema, and was brought to the Rotherham Hospital about an hour afterwards. The emphysema had by then extended to every part of the body, to the fingers, and toes. She died a few minutes after admission. No post-mortem could be obtained, but a distinct depression could be felt just below the cricoid cartilage. Mr. Garrard much regretted that so much delay occurred in bringing the child to the hospital, and thought that, had an early incision been made over the trachea to the injured part, life would have been saved.

Paralysis of Third Nerve after Puncture of Upper Eyelid.—Mr. GARRARD related the particulars also of this case, occurring in a boy aged seven. The patient was introduced. A stick had penetrated the upper eyelid. Recovery from all symptoms had occurred, except that optic nerve atrophy had resulted.—Mr. Snell, Mr. Pye Smith, and Mr. James made remarks.

Amputation at Wrist.—Dr. T. H. MORTON introduced a youth aged sixteen, whose fingers and hand had been caught between hot steel rollers, and were severely crushed and burnt. Amputation of hand was performed at wrist joint; the pisiform bone was removed, but the articular surfaces of the radius and ulnar were left intact. Cellulitis and abscess of the forearm delayed recovery, but the result was a well-cushioned, serviceable stump.

Certain Considerations on Typhoid Fever.—Mr. WEDDELL read a paper with this title. The facts related were observed in the Queensland Emigration Service, and particulars of thirteen voyages were given. The history of the earliest and many subsequent importations of this disease into the Australian Colonies was described from official sources. The conclusions were that, whilst it appears certain that with a large number of people taken from various localities, it is possible, in spite of all precautions, that the germs or contagion of any specific disease may be introduced, yet there is little danger from typhoid on a properly ventilated ship, efficient sanitary measures being observed. The early detection and treatment of tropical diarrhœa was advocated. Even when a distinct link of contagion could be traced, no outbreak of any importance took place unless the people were exposed to conditions which impoverished the blood and exhausted innervation. The accounts of ships quarantined for typhoid seem to show that the putrefaction of filth in a confined space has often been an important factor in the spread of the malady.

Reviews and Notices of Books.

Experimental Researches in Artificial Respiration in Still-born Children and Allied Subjects. By FRANCIS HENRY CHAMPNEYS, M.A., B.M. Oxon., F.R.C.P. London: H. K. Lewis.

THE work before us deals with investigations of the greatest importance, and Dr. Champneys deserves the thanks of the profession for having devoted so much time and labour to the subject, as well as for the extremely able manner in which he has prosecuted his research and marshalled his facts. Like so many byways of medicine and surgery, which are not scheduled by the examining boards or seized upon by the fitful fashion of the hour, the resuscitation of the still-born and of persons in whom respiration is at a standstill has received most inadequate treatment by experimentalists, lecturers, and authors. Dr. Champneys deals only with the matter as regards still-born children, but of necessity he trenches upon the wider ground of the relative merits of the various systems of producing ventilation of the lungs by artificial respiration both in the still-born and in those who have breathed. The first chapter, which with some of the other parts of the book will be remembered as having been contributed to the Royal Medical and Chirurgical Society, gives some highly important and interesting experiments designed to ascertain which method —and nine are investigated—of artificial respiration produces in the still-born the fullest ventilation. Of these nine methods, it is not too much to say that four only are at all well known in this country—Marshall Hall's, Howard's, Silvester's, and Schultze's; of these, the methods of the two first-mentioned authorities are valueless for the resuscitation of the still-born. The actual appea to an experimental test of the remaining methods as far as the still-born are concerned showed that all methods dependent upon the elastic recoil of the chest walls are useless; while Silvester's method, and its modifications by Pacini and Bain, give the greatest ventilation. Schücking's plan Dr. Champneys found no improvement on Silvester; Schüller's and Schroeder's, he believes, are actually prejudicial, and Schultze's, although possessing considerable expiratory vigour, is not to be commended, since the force used in its employment is undesirable in dealing with infants. The question, "What portions of the lungs become expanded under artificial respiration?" was also experimentally tested, and conclusions interesting and important to clinical observers obtained. Chapters 3 and 4 deal with mediastinal emphysema and pneumothorax after tracheotomy, and many of Dr. Champneys' conclusions possess the greatest value alike for the surgeon and the physician. Thus, having shown that mediastinal emphysema may in a certain number of cases follow upon tracheotomy, he proves that pneumothorax results from this through rupture of the mediastinal tissues and escape of air into the pleural cavity. Since the air passes *beneath* the deep cervical fascia, separation of that structure or its division low down favours emphysema, as does bungling in attempting to introduce the tube, whereby the cellular spaces are opened up. The production of mediastinal emphysema is an ever-present danger in tracheotomy, and efforts at artificial respiration are very liable to induce it unless the utmost skill and attention are used to avoid the accident. Expiratory cervical emphysema is also fully dealt with and carefully con-

trasted with mediastinal emphysema, and the widely different modes of their origin demonstrated. The importance of the pathology of this latter condition has led Dr. Champneys into a most valuable research, and he has arrived at facts of the utmost interest, but upon which we have not space to enter. The concluding portion of the work deals with various practical points occurring in attempts at artificial respiration in the still-born, and apparently dead after tracheotomy, and is far from being the least important. In reviewing this work, we cannot speak too warmly of the skill evinced in planning the experiments and the accurate deduction practised in formulating conclusions. It marks a distinct advance in our knowledge both in pathology and of the details of methods for efficient pulmonary ventilation.

Sprains: their Consequences and Treatment. By C. W. MANSELL MOULLIN, M.A., M.D. Oxon., F.R.C.S. Eng., Assistant Surgeon and Senior Demonstrator of Anatomy at the London Hospital; formerly Radcliffe Travelling Fellow and Fellow of Pembroke College, Oxford. London: H. K. Lewis. 1887.

IN this little work Mr. Mansell Moullin deals with a subject of great importance, and one that deserves far more attention than it generally receives. The term "sprain" is of vague significance, and is used to denote a group of injuries varying widely in their severity and in the structure involved. A "sprain" may be so slight as almost to escape observation, and so severe as to imperil a limb. It may involve any part of the joint proper, or implicate also muscles, tendons, and vessels. But the subject derives still further importance from the gravity of the late results of apparently trivial sprains, and also from a general laxity in treatment. "It's only a sprain" is often heard as an assurance that the injury is not serious, and that its treatment is not difficult or urgent. The author clearly shows the error in this teaching, and, if for no other reason, his book is very acceptable. The various injuries grouped together under the head of "sprains" are described, and their appropriate treatment is detailed. This is carefully, simply, and well done, and the reader of this book must lay it down with a sense of a truer and higher appreciation of the importance of "sprains," both for diagnosis and treatment, and of the questions connected with their diagnosis. Mr. Moullin writes in an easy style, and but a very slight effort is required to follow him. In some places he seems to us to have written as if for men entirely ignorant of human anatomy. This no doubt was an oversight. So far as we have seen, the practice recommended by him is quite safe, and is the best known at present.

On the Growth of the Recruit and Young Soldier, with a view to a judicious selection of "Growing Lads" for the Army, and a regulated system of Training for Recruits. By Sir WILLIAM AITKEN, M.D., F.R.S. Second Edition. Pp. 259. London: Macmillan and Co. 1887.

ALTHOUGH this is professedly a second edition of the *brochure* bearing the same title published by the author in 1862, it is in reality a new and more comprehensive work. During the twenty-five years which have since elapsed important changes have been made in the organisation of the army, which have involved the necessity of enlisting annually more than double the number of recruits required under the previous system. To meet this increased demand it became imperative to lower the standard of height, and as it is impossible to obtain evidence of the age of the recruits who present themselves, this reduction involved the possibility of lads under eighteen years of age enlisting unless some check were introduced. With a view to minimise, as far as possible, the chance of the enlistment of lads unequal to the amount of work required from recruits, the responsibility of ascertaining the height of the candidates was transferred from the recruiting officer to the inspecting surgeon, and specific instructions were laid down as to the minimum chest-girth and weight of those who were to be deemed fit for service. One of the objects of the present volume is to assist the medical officer "to decide the apparent age by comparing the height with the weight, chest-girth and general physical development and growth of the recruit, recognising his antecedents in relation to modifying influences, especially in the search of 'staying power,' of healthfulness of constitution generally, and freedom from disease." This object the author has endeavoured to carry out, and in our opinion very successfully, by a careful examination and statement of "the physical equivalents" which may indicate the age and physique of the recruit, and the influence of certain modifying agencies upon development and growth. He has gone at considerable length into the question of the progressively gradual development of the recruit and young soldier as regards the osseous system and the vital organs which it encloses or protects, and has included in his work a number of valuable tables illustrative of the different points of which he treats. The appendix contains the existing regulations as to age, height, weight, and chest measurement of recruits for the Army and Militia, and extracts from the regulations of the Army Medical Department relative to the examination of recruits. The book is one which deserves the careful study of army medical officers in view of the increased responsibility thrown upon them by the changes in the organisation of the army, and in the mode in which the recruiting service is now conducted. We would also recommend it to the attention of all civilian medical practitioners who may be called upon to perform the duty of inspecting recruits. It is much to be desired that the results of the examinations by the latter were more in accord with those of the army medical officer than the statistics of recruiting show them to be, and this would be very much promoted by a study of Sir W. Aitken's work. It has a good table of contents, and a carefully prepared index. We would suggest, in any future issue that may be called for, the addition of a list of the various tables scattered through the work; this would greatly facilitate reference to information in a condensed form, which might be desired for immediate use by medical officers in the discharge of the duty of examination.

Manual of the Vaccination Law. By a BARRISTER-AT-LAW. London: Shaw and Sons. 1887.

MANUALS on this subject had all got out of date, and some were so ill-arranged that they lacked the simplicity needed for purposes of reference. Messrs. Shaws' manual is free from all these objections; and its introduction alone will make it a very helpful work to public vaccinators and vaccination officers, who, besides having to administer the law in certain respects, have also at times to convince the public of the true value of vaccination. This introduction, which covers some fifty pages, and is compiled by the editor, consists of a short history of vaccination and of the law relating to it; it gives ample evidence to show how the death-rate from small-pox has been diminished by reason of vaccination; it sets forth the grounds on which it is so necessary that vaccination should be performed with the highest degree of efficiency possible; it enters into the reasons which make revaccination so desirable; it explains the circumstances under which vaccination may produce injury; and it deals, amongst other things, with the relative merits of animal and humanised lymph: the several points discussed being supported by means of cases quoted and statistical evidence. In the body of the little work the several clauses of the Acts relating to vaccination are well and usefully annotated, and the several orders as to vaccination, including the New Instructions to Public Vaccinators, are set forth. It is unquestionably the best and the most

useful manual on the subject, and it is clear that its anonymous editor is fully conversant with every detail connected with the administration of the vaccination laws.

Diaries.—We have received further specimens of these useful volumes. Blackwood's Diaries are published in over forty different sizes, and include most convenient descriptions for the office or pocket, at low prices. Charles Letts's series embraces upwards of eighty varieties, and contains an abundance of information which is practically in daily demand. The specimens before us from both these publishers are excellent, and can be cordially recommended to intending purchasers of such books.

SOCIETY FOR THE STUDY OF INEBRIETY.

AN address on the "Effects of Moderate Drinking on the Human Constitution" was delivered at the rooms of the Medical Society of London, on Nov. 23rd, by Dr. George Harley, F.R.S., who began by saying that he thought it might not inaptly be called one of the most burning questions of the day, seeing that the question of temperance is being at present hotly discussed, not only from a social and a medical, but from an individual and a national point of view. And notwithstanding that the majority of men are moderate drinkers—and consequently most patients belong to this class,—very little is as yet known of the effect on the system of small quantities of stimulants, although the effects of large quantities are familiar to all. The great difficulty the profession has in ascertaining exactly what are the real effects of small quantities of alcohol on the constitution arises from the following factors:—1. In no instance are the direct deleterious effects of moderate drinking sufficiently marked to necessitate any special form of treatment in a public institution. 2. Its deleterious influence on the bodily functions are so insidious as often to be attributed to entirely different causes. 3. The effects of moderate drinking manifest themselves in such a variety of different shapes that no single practitioner sees a sufficiency of any one of them to be able to draw reliable conclusions from them. 4. It is only men specially engaged in the treatment of liver, kidney, and brain diseases who come across the severer forms of functional derangements directly traceable to the effects of a moderate indulgence in alcoholic beverages. 5. In addition to which the matter is further complicated by the fact that several collateral problems require to be solved before even the threshold of the inquiry can be passed. Dr. Harley treated the various points in the following order:—The visible, the chemical, the physiological, the pathological, the therapeutical, and, lastly, the dietetical effects of stimulants upon the system.

Firstly: He began by pointing out that the visible and immediate effects of alcohol on the bodily functions, when it is taken in a quantity beyond what the system can tolerate, are those of cerebro-spinal paralysis, as it suppresses every function of the brain, cerebellum, and spinal cord. On the other hand, when taken in moderate quantity its primary effect is that of a cardiac and cerebral stimulant, the cardiac stimulating effect being apparent by the quickening of the pulse and the retinal congestion, while the brain stimulating effect is noticed in the volubility of speech and the restlessness of manner. The primary effect is, however, rapidly followed by the supervention of its paralysing action, as is seen by the special senses of feeling, tasting, hearing, smelling, and seeing becoming obtuse, on account of the impending paralysis of the sensory nerves, the speech becoming thick and the gait unsteady. From a similar incipient paralysis of the motor nerves, coupled with a loss of the coördinating power of the cerebellum. The intellectual faculties likewise exhibit the paralysing action by a diminution of mental grasp, associated with a tottering of the moral control. Even the sympathetic nervous system is not exempt from the paralysing power of alcohol, as is seen, firstly, by the flushed and heated face, and, secondly, by the subsequent cold, clammy, pallid cheek.

Secondly: This action of alcohol on the nervous system Dr. Harley said he believed was entirely due to its peculiar chemical action on blood-nerve-pabulum. Quoting a number of experiments, showing that even such a small amount of alcohol as 5 per cent. completely deranged the functions of the blood, more particularly its power of absorbing oxygen and exhaling carbonic acid, and seeing that every function of organic life is intimately connected with oxidation (for in exact proportion as it is accelerated or retarded are the main functions of the body accelerated or retarded), this asphyxiant action on the blood-nerve-pabulum, he thought, was amply sufficient to account for the gradually obtusing, and ultimately completely paralysing, action of the alcohol on the nervous system.

Thirdly: Dr. Harley next considered the extraordinary effects alcohol in small quantities produces when directly conveyed to the liver through the portal circulation, citing in illustration the experiments of himself and Bernard (who followed him in this respect) on the artificial production of diabetes in animals by the injection of from 10 to 16 centimetres of alcohol and water into the mesenteric branches of the portal vein, and adducing this as an explanation of—

Fourthly: The effects of nipping (not actual drunkenness), as shown by the tables of comparative mortality in the Registrar-General's reports, which conclusively demonstrate that those given to nipping have a six times greater mortality from liver diseases than others, and that the kidneys, heart, and brain are the next three organs which so-called small indulgences in alcoholic drinks cause to become diseased.

Fifthly: From this part of the subject the lecturer passed on to the consideration of the pernicious effects of over-stimulating in cases of dangerous diseases, and pointed out the great difference between the merely stimulating effects of spirits, in the shape of brandy, whisky, gin, and rum, as compared with the nutritive as well as stimulating action of wines and beers in the treatment of exhausting diseases. The use of the latter in all cases where the exhausted patient could take little nourishment he recommended as strongly as he condemned the use of the former in the graver forms of exhausting disease.

After specifying *seriatim* the therapeutical actions of alcohol when taken in different quantities in various diseased states, Dr. Harley turned to the question: Is alcohol a food? To which he replied that although alcohol could not be regarded as a food in the same light as bread and beef, yet in so far as it had the power of indirectly aiding in the sustaining of vital phenomena, more particularly by assisting in the digestion and assimilation of other foods when taken into the stomach in small quantity, he considered it had a legitimate claim to be ranked as a supporter of animal life. Finally, he wound up by saying that, although he was a strong advocate for temperance, he approved of the present social habit of taking wine at dinner parties, for he believed that when taken in strict moderation it was conducive alike to happiness and health, as it made one feel not only contented with oneself, but pleased with one's companions, and consequently materially contributed to one's personal comfort; for, as everyone knows, good spirits are promoters of digestion, as well as whetters of the appetite, while ill-humour is exactly the reverse.

The second of a series of two lectures was delivered by Dr. Norman Kerr on Nov. 30th, in the large room of the Medical Society of London. The subject was "The Different Forms which Inebriety may assume." The lecturer began by defining inebriety or narcomania as a disease of the nervous system, characterised by a very strong morbid impulse to, or craving for, intoxication. When developed, it appeared in varied guise. These forms were first divided into two general groups, periodical and constant inebriety. Of 103 admissions to the Dalrymple Home, 45 were of periodic inebriates. American experience was similar. Among females functional periodical inebriety was the most common; functional perturbation at the various crises of puberty, parturition, lactation, and the menopause being a prolific cause. There were also many varieties of male inebriate periodicity. There were regular and irregular periodicities. Cases were cited illustrative of chronological, weekly, fortnightly, lunar, and other periodic inebriate outbreaks; as well as of the periodicities of occasion, commercial and climatological forms. Among the cases of constant inebriety referred to were those of medical men, clergymen,

literary and scientific workers, and Christian visitors. Both periodic and habitual inebriates could be classed under two other heads. Inebriety might be social or solitary; some never drink except in "good companie," or they indulge only when alone. The disease of inebriety at times assumed a form determined by some complicatory disorder. There was in this way the inebriety of insanity, as of syphilis, of heat apoplexy, of operations, &c. An extensive group of forms was that where the particular form was correspondent to the particular inebriating agent. Though in many cases the disease existed prior to the manifestation of inebriate symptoms or to consumption of any intoxicant, the subject of the disease loathing the potion itself, the characteristic narcotic and anæsthetic properties of the different inebriants gave a variety of forms of the morbid affection. Alcoholic inebriety was first considered, with its modification by idiosyncrasy, by the strength of the intoxicating principle, by the kind of alcohol, as well as by the variety of beverage. The lecturer here pointed out the varying properties of the heavier and lighter alcohols, the recent outbreak of methylated spirit inebriety, the differences between wine, champagne, beer, and spirituous inebriety, the special features of absinthe intoxication, of cider inebriation, of kava, and other forms. Intercurrent affections of alcoholomania introduced delirium tremens, mania a potu, alcoholic epileptic mania, fatal and non-fatal alcoholic poisoning, chronic alcoholism, alcoholic dementia, alcoholic multiple neuritis, &c. Opium inebriety differed from alcohol inebriety, in being a functional disease without the marked organic lesions observed in the latter, in being a solitary, unsocial habit, in being more continuously indulged in, in being less persistent among females, and, though less perverting to the *morale*, in being more difficult of cure. Opium soothes, alcohol maddens; opium raises, alcohol lowers, temperature. Enormous quantities of opium were taken. Chloral inebriety was increasing alarmingly, was unsocial, and generally associated with alcohol. This was a disease of function, and was affected by both sexes. Chloral, like alcohol, reduced temperature. Chlorodynomania was also spreading; one patient had taken an ounce a day for six years; three and four ounces had also been taken daily. Generally occurring in females, chloroform and ether inebriety were contrasted. Both were increasing. The chloroformaniac led a life of alternate woe and bliss till it crystallised into a protracted misery, was very fatal, and was usually solitary. Etheromania was less terrifying and less fatal, but as imperious. The lecturer narrated cases in London practice, and described the ether intoxication in the north of Ireland. Gelseminum and cocaine inebriety were touched upon, and Dr. Kerr concluded by considering the question, "Is there a true tobacco inebriety?" to which he replied in the negative.

PROVIDENT DISPENSARIES.

A PUBLIC MEETING was held on the 6th inst. at the Society of Arts, under the presidency of Sir T. Spencer Wells, to consider the report of the Medical Attendance Organisation Committee appointed at a conference held about twelve months ago at the same place. This committee, consisting of medical and lay members, recommended a comprehensive scheme of medical attendance for the industrial classes in the metropolis on a self-supporting basis, involving the creation of dispensaries in each district, these dispensaries to form a union with the hospitals. The proposed subscriptions were sixpence a month each for single persons, a shilling a month for a man and wife without children, tenpence a month for a man and wife with children, and threepence a month each for children under sixteen years of age. These institutions, it was suggested, should be available only to persons who could declare that their earnings did not exceed the following rates: For a single person, or a man and wife, an average of 30*s.* a week; for a family, 40*s.* a week; and for domestic servants, £15 a year. Persons requiring immediate attendance should pay an entrance fee of not less than half-a-crown, which should entitle them to treatment for one week, after which, if they should continue ill, they should pay not less than a shilling a week if able to call upon the doctor, and not less than half-a-crown a week if visited at home. This higher rate was deemed necessary in order that the dispensaries might retain their strictly provident character. In the opinion of the committee, the indiscriminate manner in which the public are admitted to the out-patient departments of hospitals inflicted great injury on a large number of ordinary medical practitioners, and tended to pauperise the applicants, and to waste the time of the medical staff of the hospitals.

Sir Spencer Wells, in opening the proceedings, warmly advocated the proposed scheme, as calculated to engender habits of prudence and self-reliance in the poorer classes. No doubt the payments were small, but he believed the medical profession did not realise how large they might become in the aggregate.

Mr. Timothy Holmes moved the first resolution, which was as follows:—"That the scheme of the Medical Attendance Organisation Committee for the regulation of provident dispensaries be accepted by this conference as worthy of the support of the working classes of the metropolis, and as offering an equitable basis for the co-operation of the medical profession." He said that any scheme must be necessarily somewhat of a compromise. It was more difficult to deal satisfactorily with this question in London than in country towns, because in the metropolis they were trammelled by the fact that the poor were not only invited but solicited to accept gratuitous medical relief from institutions with which the best-known names in medical science in the country were connected, and the poorer classes could not therefore be made to see at first sight why they should pay for that which could be got for nothing. Therefore the second part of the report as to the means by which provident dispensaries could be connected with the hospitals was of urgent importance. The scale of fees was exceedingly moderate, and one which ought to be within the reach of all poor persons who were not paupers. The only doubt in his mind was whether the scale was sufficient for the wants of the medical practitioner. Another matter upon which the framers of the scheme were very much exercised was the possibility of excluding persons beyond a reasonable scale of earnings from the benefits of the scheme. It was very easy to name a figure of limitation, but in practice it gave rise to very great hardship. The active co-operation of the medical profession was absolutely necessary for the working of the scheme.

Dr. J. Grey Glover, in seconding the motion, said his only doubt was whether the fees were adequate. When they saw handbills issued offering medical attendance for 6*d.* a visit or 1*s.* per week, or the announcement of a children's medical fund at a grocer's shop, it was time something was done to maintain the dignity of the profession. (Cheers.) The hospitals had a splendid chance of increasing their usefulness by co-operating with the promoters of the scheme.

Mr. J. P. Hentsch proposed, and Dr. Paramore seconded, an amendment declaring that, whilst a check ought to be put on the present system of indiscriminate out-door relief, it would not be advisable to adopt the scheme submitted by the committee.

A discussion, in which Mr. R. H. S. Carpenter, Mr. A. P. Hills, and others took part, followed, and the amendment was shortly afterwards put to the meeting and negatived, the original motion being carried by an overwhelming majority.

On the motion of Mr. W. Bousfield, seconded by Dr. Gilbart Smith, it was afterwards agreed to approve of the co-operation of hospitals with provident dispensaries.

The proceedings then terminated.

THE HOSPITAL SUNDAY FUND.—Of the £37,525 which the Hospital Sunday Fund Committee of Distribution recommend be awarded to the 101 hospitals, 7 institutions, and 50 dispensaries, the following are the sums apportioned to the twenty-one London general hospitals hereinafter named:—Charing-cross, £939 11*s.* 8*d.*; French, £208 6*s.* 8*d.*; German, £677 1*s.* 8*d.*; Great Northern Central, £270 16*s.* 8*d.*; Italian, £67 14*s.* 2*d.*; King's College, £1354 3*s.* 4*d.*; London, £3333 6*s.* 8*d.*; Metropolitan, £208 6*s.* 8*d.*; Miller Hospital and Royal Kent Dispensary, £260 8*s.* 4*d.*; North-West London, £260 8*s.* 4*d.*, Poplar, £239 11*s.* 8*d.*; Royal Free Hospital, £885 8*s.* 4*d.*; St. George's, £1875; St. John and St. Elizabeth, £145 16*s.* 8*d.*; St. Mary's, £1822 18*s.* 4*d.*; Seamen's, Greenwich, £572 8*s.* 4*d.*; Middlesex, £1979 3*s.* 4*d.*; Tottenham Training Hospital, £281 5*s.*; University College, £1510 8*s.* 4*d.*; West London, £520 10*s.* 8*d.*; and Westminster, £937 10*s.*

THE LANCET.

LONDON: SATURDAY, DECEMBER 10, 1887.

WE announced last week that the petition praying for a Charter under the style of "The Senate of Physicians and Surgeons," with power to grant degrees in Medicine and Surgery, had been presented to the QUEEN in Council by the Royal College of Physicians of London and the Royal College of Surgeons of England, and that this petition will be considered by a committee of the Privy Council on the 16th of January in next year. It is doubtless because of the delay in forwarding these documents, which were laid before the Royal Colleges in July last, when the delegates were empowered to carry them into effect, that the consideration of the scheme proposed by University and King's Colleges has not yet been considered. The question of the formation of a university with faculties in other subjects is so intimately connected with the power of granting degrees in a medical faculty only that the schemes could only be taken together, and we hope that no time will now be lost in deciding on the two proposals. The petition and draft Charter now presented are exactly the same as the copies printed by us on July 2nd, and their clauses were thus summarised by us in our editorial columns of that date:—

"The delegates of the Royal Colleges have also submitted for approval drafts of a petition and Charter, and these, having also been passed by the Fellows of the College of Physicians and the Council of the College of Surgeons, will at once be laid before the Queen in Council. By the Charter, which is published in another column, power is sought to form a governing body of forty-eight persons—twenty-four from each College—to be called the Senate of Physicians and Surgeons, to whom shall be entrusted the framing of the necessary regulations and the authority to see that such regulations are complied with. The Council of the College of Surgeons is composed of twenty-four members, and these will, as elected, become the representatives of that College on the Senate, whilst twenty-four Fellows of the College of Physicians are to be chosen, three of them to go out of office annually, but to be eligible for re-election. We cannot but think that this eligibility for re-election is a mistake, for it will allow only a minimum of change, and the Senate will practically become a permanent body, devoid of a sufficient number of young members to enable it to readily adapt itself to changes in teaching and examination. An error similar to that committed by the founders of the University of London should have been avoided. The President of the Senate will hold office for two years, and will be in succession the President of the College of Physicians and of Surgeons respectively, whilst two Vice-Presidents will be elected annually from among the members of the Senate. Twelve members are necessary to form a quorum, and the vote of the majority present is to be decisive. The degrees in Medicine and Surgery are to be conferred on any person who, 'by passing the examinations formerly held by both of the Colleges separately, or by passing the examination held by the Examining Board of the two Colleges, or by passing any other examination to be held by the two Colleges jointly or separately, has already acquired or may hereafter acquire, the qualifications for registration under the Medical Act, and who shall have also complied with such further regulations (if any), or undergone such further examination (if any), as the Senate may from time to time see fit to impose or require.' The past Licentiates of the College of Physicians and Members of the College of Surgeons will by this clause be placed on exactly the same footing as those who qualify in the future, and this just and far-reaching provision will secure a wide amount of sympathy among the members of the profession in favour of the movement. The questions of an additional examination or examinations and of a title are left open for future discussion, and are therefore omitted from the Charter."

It will be noticed that the term "University" is omitted from both the petition and the draft Charter, but this is scarcely likely to disarm any proposed opposition, for the power of granting degrees has hitherto exclusively belonged to a body with this title. As time has passed on, the objections to a one-faculty University have steadily increased, for the scheme of the two Colleges is opposed by most of the Universities, who demur to this power being granted to corporations; by the Colleges of Surgeons and Physicians in Scotland and Ireland, who desire similar power if it be granted to the London Colleges; by the provincial medical schools, who object to London medical students having degrees conferred on them, with a compulsory term of residence as a condition; and by the Society of Apothecaries, whose diplomates are left out in the cold. These objections will all be presented to Her Majesty in Council before the date fixed for the consideration of the petition. The petition and charter of University and King's Colleges, which have practically received the support of the Association for promoting a Teaching University in London, were printed by us on August 6th, so that the two schemes can be compared by those who take interest in these important educational movements. The University of London has entered a *caveat* against the formation of a new University in London, although its proposed functions and objects are so entirely different from those now discharged by the existing institution, and its statement has also been laid before the Privy Council. This action of the Senate received the support of the majority of the members of a combined committee of the Annual Committee and of the Special Committee on the Constitution of the University on November 25th, and the question will be brought before Convocation at their next meeting in January. It is curious and interesting to note that the University of London alone protests against the formation of a University by the two great teaching institutions in London, whilst all other Universities except London object to the two Royal Colleges of Physicians and Surgeons being empowered to grant degrees. We shall return next week to the Statement which has been forwarded from the Senate of the University of London to the Privy Council and which, together with a petition from the Association of General Practitioners, we print on pages 1186 and 1187.

FORTY years ago CHARLES KINGSLEY told the story of the tailor's life—told of all the degradation and misery which resulted from the employment of middlemen who intervened between the master tailor and his men. Thirty years before, this system was unknown. Masters who received orders employed the working tailors directly, and the work was done in the master's house and reasonable wages were paid. But the times altered, Government

contracts were let to the lowest bidder, and the system of cutting down prices led to the employment of the middleman, often not a tailor himself, whose sole occupation was to let the work to someone else, and to live upon the profits for which he did not labour. When KINGSLEY wrote his Parson Lot tract on "Cheap Clothes and Nasty," the slang of the trade had already divided the shops into two groups, the "honourable" and "dishonourable," the former employing men on the premises at fair wages, the latter giving men the work to take home at the smallest possible remuneration. But worse than this, the work was not given to them directly, but to a "sweater," so that the profit was divided not between the master and the men, but, to use KINGSLEY'S words, "the sweater and perhaps the sweater's sweater, and a third, and a fourth, and a fifth," had their share of it. Even at this time the honourable shops in the West-end were but sixty, while the dishonourable numbered four hundred and more; while at the East-end the honourable shops were unknown. Ground down by this system, the conditions under which the working tailors lived were heart-rending to a degree; sleeping together, working together in ill-ventilated rooms, working from early morning till late at night, and often through the night, they readily fell a prey to disease, phthisis especially attacking the breathers of the vitiated air in which they lived. Even the paltry wages which they received were taxed to pay usurious rent and high rates of food, which the sweater supplied. The moral and physical degradation was clearly proved; separate public meetings were held of working tailors employed both in the honourable and dishonourable trades, and the appearance of the attendants at these meeetings showed but too plainly to which branch they belonged. The publicity given to the facts to which we have referred aroused considerable interest, the subject was discussed in pamphlets and in newspapers, and at last there seemed some prospect that the system under which human beings starved would be so far modified that Alton Locke and his associates would be numbered with the past.

Forty years ago! And what has happened since? The condition of the working-classes generally has improved, the necessaries of life have become cheaper, the Factory and Workshops Acts have been directed towards the limitation of the hours of labour for women and young people employed in these places, but the sweating system has continued, and the account given by KINGSLEY of the tailors' sufferings is as true now as it was when he wrote the history of Alton Locke.

It is little more than three years since our Commissioner instituted an inquiry among the tailors in the East-end of London, and visited their homes and workshops. He found the "sweater's den" ill-ventilated, over-crowded, and dilapidated; the requirements of the Factory Acts rarely complied with; the inspector's visits rendered useless, for "on the appearance of any stranger the women are often distributed about the private parts of the house—in the bedrooms, kitchens, and so forth. If any question is asked, there is always a ready reply: the one is a niece, the other is a daughter; and if they are working, it is only for the family, and not in the pursuit of their trade." The unfortunate worker, we were told, greedily accepts starvation wages, and even assists his employer to defy the laws instituted to protect him, fearing that by availing himself of our Legislature he may lose the little he is able to earn. Even in factories where the law is complied with, the women are only paid for three-quarters of the day, and if a woman wishes to earn a full day's wage she must work from eight in the morning till eleven or twelve at night. The evils which KINGSLEY described had even become accentuated owing to the immigration of foreigners, mostly of Polish Jews, whose only means of existence was the learning this ill-paid trade.

There is now presented to Parliament the report of Mr. J. BURNETT, the labour correspondent of the Board of Trade, whose duty it was to inquire into the sweating system at the East-end of London, and as the result of his labours the public are enabled to learn the cause of the increasing misery which seems inseparable from the tailor's trade. The demand for cheap clothing has not only reduced the remuneration of the tailor, but has led to a minute subdivision of work, so that we have "cutters, basters, machinists, pressers, fellers, button-hole workers, and general workers all brought to bear upon the construction of a coat," so that the workman who was formerly competent to make the whole garment is replaced by others whose knowledge only extends to a portion, and thus numbers of persons come to be employed who are only required to contribute to a small fraction of the whole. The less complete knowledge that is needed is easily acquired by the foreign immigrant, and as the result thousands of Polish and German Jews have entered into competition with the English tailor, and the sweater is able to sublet his work to these unfortunates at almost nominal wages. The inspectors of factories and workshops have doubtless done their best, but they are obviously unable to control the conditions of work in the numberless places in which it is carried on.

The report teems with evidence that the workers are paid at rates which are insufficient to maintain life for any lengthened period. For a woman to be unable to earn more than seven or eight shillings a week when in work is a common event; thus, a female trouser finisher, who is mentioned, receives "fourpence per pair for large, thick trousers, which she gets from a woman in the same house, who herself gets them from a sub-contractor. She could make six or seven shillings a week at this work." The price for making children's suits, except a little braiding done after the work is sent back, ranges from threepence to elevenpence, with cotton to find. Button-hole workers often get but a halfpenny per hole. The hours of work are dependent upon the requirements of the trade, often lasting from six in the morning until midnight; and one woman told the story how, when the inspector came after hours to a Jew's workshop, she was sent out into the yard and the gas turned out, but that after he had left she was obliged to work two hours longer. For the operative to complain of these conditions is to lose his work; there are but too many others who are glad to obtain it.

The remedies to which Mr. BURNETT directs attention are, mainly, the increased control of the hours of labour and the application of the Factory Acts to men as well as to women, the restriction of the immigration of foreigners, the elimination of the sweating system for work done

under Government contract, and finally the strict enforcement of the Factory and Public Health Acts. The subject is urgently pressing, and the public must bestir themselves to terminate an evil that has become intolerable. Much might undoubtedly be done if right-minded persons refused to give their custom to any but master tailors who employed directly their own workpeople without the intervention of the sweater, and who provided suitable workshops in which the trade could be carried on. For those whom no other consideration will move, they may well think of the risk of infection to which they are exposed by wearing clothes made under conditions which are absolutely incompatible with health; it is the daily experience of London health officers to find fever and small-pox prevalent in rooms in which the tailor works, and none can tell how many of the unexplained cases of contagious maladies among the rich may not be due to these overcrowded and unhealthy tenements. But whether feelings of philanthropy or fear are to exercise an influence, it is surely time that some strenuous effort was made to terminate circumstances that are a disgrace to our civilisation.

WE appear now to have come to the termination of the fourth year of the European cholera prevalence of 1884-87, and during the year now drawing to a close the epidemic has been much more circumscribed and much less fatal than during either of the three previous years. Apart from a slight recrudescence of cholera in Austria-Hungary early in 1887, the disease has been limited in its manifestations to the southern half of Italy, including the island of Sicily, and to Malta.

The first outbreak that was notified in Southern Europe was the occurrence of a few isolated cases and deaths in the province of Catania, in Sicily, in March last. From that date until July no further intelligence was received, but in the latter month the disease became widely prevalent in the same province, and it extended to several of the neighbouring provinces of the island—namely, those of Girgenti, Syracuse, Catania, and Messina. The southern coast of the mainland also became infected, the disease being as yet limited to the province of Calabria. In all, over 200 fatal attacks occurred in Italy during that month. With the month of August there was a considerable extension of the disease in Sicily, the provinces suffering most being those of Catania, Messina, and Palermo, a large number of inland towns and villages being also attacked. On the mainland the most important extension during August was to Naples and certain places along the gulf, the total record for the disease during the month in Italy being over 700 deaths. But during August Malta also became invaded, and, the disease spreading somewhat rapidly inland to the villages occupied by the natives, as many as 128 deaths occurred. With the month of September a very serious exacerbation of the disease occurred in Sicily, the towns of Palermo and Messina and the province of Catania being principally involved. In Messina alone there were nearly 1900 attacks and over 800 deaths. On the mainland there was also a substantial increase in the fatality. The disease still clung, in the main, to Naples and such places as Pozzuoli and Castellamare in the neighbouring gulf; but there was also some recrudescence in the southern part of Calabria, and notably near Cape Colonne, and a few fatal attacks were reported from Rome. In all, no less than 1500 cholera deaths were publicly notified. In Malta the disease was still steadily maintained, and before the end of the month 141 additional cholera deaths had been registered.

With the month of October there came a decided diminution of the epidemic in Sicily; the outbreak was all but confined to the town of Messina, and the total death-roll for the month fell to fifty-eight. And at the same time no fresh intelligence as to cholera was received from the mainland. But in Malta the epidemic was maintained with much the same severity as had characterised its spread and fatality during the two preceding months, and between 140 and 150 more cholera deaths took place. The month of November brought the epidemic to a close. No fresh cases were reported either from Sicily or from the Italian mainland; by the middle of November intelligence of fifteen additional cholera deaths had arrived in Malta, after which all further news ceased. The total mortality from cholera during the year in Italy, including Sicily, was somewhat over 2200; and in Malta it was 429. This result stands in contrast to a fatality in Italy of 14,299 in 1884, of 3469 in 1885, and of at least 6244 in 1886.

The epidemic has again been replete with lessons teaching the great power of efficient sanitation as the only trustworthy means of combating the disease. Rome, with its unpolluted water services, has again stood the test of imported infection; the incidence of the disease in Naples has been but trivial when compared with that which marked the year 1884, before the city was provided with a proper water supply; and the abandonment by Italy of the system of quarantine by land, and to a large extent by sea, has also been associated with a diminished amount of cholera. On the other hand, Malta, always one of the foremost in imposing stringent quarantine regulations, has found these to fail her; whereas the influence of proper sanitary measures has been shown by the striking immunity from the disease of the garrison, who have clean and decent lodgment, and by the limitation of the epidemic to the worst and most insanitary localities occupied by a native population, who, instead of cleansing their villages and their houses, have been led to trust in the quarantine restrictions imposed by their Government. The lesson thus taught ought not to be thrown away; and it is to be hoped that it may lead to a reconsideration by the Colonial Office of the attitude they hold with regard to this question, in advising the Home Government to give their sanction to a local law which brings about such serious results. Our Government have now refused to allow a troop-ship to be put in quarantine off Suez, and they have thus dealt a first blow at the Egyptian regulations; the same policy should be followed as regards the retrograde measures adopted in our little Mediterranean colony.

In the United Kingdom we have for a fourth year succeeded in preventing cholera from effecting an entrance in our midst, by means of reasonable measures of precaution at our ports, and by the aid of the great impetus to increased sanitary supervision which was brought about by the knowledge of the danger, and by the results of the Government Cholera Survey in so many parts of England and Wales. All vessels coming from infected ports have been

dealt with by the medical inspection system; means of isolation have been very generally in readiness in case of need; and in no instance has any anxiety occurred, and this notwithstanding the fact that we are, by means of our commerce and otherwise, brought into such constant communication with the countries which, both in Europe and in the East, have been affected with cholera. The past should inspire confidence in our system of prevention, and, having regard to its value in connexion with many other diseases than cholera, it should act as an incentive to us to continue to carry out its principles without relaxation.

AT a time when science is endeavouring to provide for death by sleep for the lower creation, it is not too much to hope that something of the same kind may be provided for man. Dr. B. W. RICHARDSON, the inventor of the lethal chamber which has been erected at Battersea for the painless extinction of the life of the friend of man, the dog, said in his lecture on Euthanasia for the Lower Creation, delivered before the Society of Arts, in which the details of the lethal chamber were described, "that man could never hope to secure for himself so painless and happy a death as had thus come through the hand of science to the lower animal kingdom." And, indeed, the difficulties surrounding the question whether the death of man can always be rendered painless are so great that for the present they seem irremovable. Mr. WILLIAMS, in his work on Euthanasia, published some twenty years ago, argued in favour of the idea. He urged that man ought, as a being having free will and judgment, to claim the right, when death was inevitable, to have the act of death made painless. Mr. WILLIAMS was, if we remember correctly, a schoolmaster by profession, and, although a very able and observant man, had not the practical knowledge of the subject to enable him to work it out in such a manner as to carry conviction of sufficient quality to institute a practice.

The author of "The Right to Die" strikes out somewhat in the same lines, but he also does not appreciate what are the obstacles, moral and legal, against any organised method for conferring on the human subject the boon of a painless death. All lay writers who handle this subject turn to the profession of medicine to settle the difficulty. The doctors are to be the men to give the *coup de grâce* to writhing, or flickering, or hopeless men, women, and children in the throes or agonies of death, and the profession very wisely—nay, even humanely—withdraws from the proposition. The members of the profession feel that it is their duty to prolong life in a very large number of instances to the very last flicker. They sometimes see by this action life restored when all has seemed to be lost. They have, in fact, no correct measure of absolute death short of death itself, and there are cases where death seems actually to have taken place in which there is doubt whether an inappreciable spark of life may not remain and once more declare itself. Such facts as these have ever stood, and promise long to stand, athwart the practice of euthanasia *secundum artem* as a system, if the professors of medical science and art are to be the administrators.

There is, nevertheless, a divine and blessed art at the discretion of every medical man. If the physician or surgeon may not shorten life methodically even under the most pressing circumstances, he may shorten pain and make the inevitable death easy and tranquil. For this reason we rejoice to welcome the new work of Dr. MUNK on "Euthanasia, or the Medical Treatment in Aid of the Dying."[1] We have known Dr. MUNK long as one of our rare medical scholars, and have been always grateful to him for that Roll of the Royal College of Physicians which is sure to place his name on the roll of fame as one of the trusted and trusty writers of biographical history. But here he appears before us in a new light. He has looked up the authority of history to learn how far the physician may advance on the best authority of his profession towards treatment in aid of an easy death; he has added to what he has read that which he himself has observed, and has put into a nutshell the duties of the medical practitioner in regard to euthanasia, in a style as simple as it is classical. His suggestions for treatment are confined to the rules which, applied to the dying, enable the physician so far to make use of remedies of the true narcotic class—alcohol, opium, ether—and of antispasmodics like nitrite of amyl—to the extent of alleviating acute sufferings, and, without hastening death, of making the approach to death peaceable. To this extent medical art may go; no further. If it went further, it would be ever open, in its most innocent development, to the criticism of suspicious relatives and friends; while it might be made the cause of doubts which had a real meaning, and which would of a certainty give origin to many serious legal inquiries. In plain terms, euthanasia, beyond the position in which Dr. MUNK has so judiciously put it, is an impossibility unless the law is allowed to render its extension possible. The study of Dr. MUNK'S little treatise may, however, we foresee, reproduce discussion on a collateral, and to some minds very important, question. There are persons who contend that the law should be so changed that one stricken with a fatal disease—say, fatal malignant disease—might, on his own instance, guard by proper legal instrument everyone else from blame, and thereupon claim the benefit of euthanasia. In any proposed change of law for allowing this practice, the medical profession would undoubtedly have a powerful voice for or against. Yet if the law were changed the position of the profession would remain the same. There is no more reason that a representative of medicine should take part in the production of the euthanasia than anyone else. His diagnosis might determine the fact that the sufferer would die from disease. His evidence might be required to determine that death had taken place. But the State would have to determine the mode of death, and the manner in which it should be carried out. The State would have to appoint a legal administrator, or would permit the applicant for relief from life to take the cup, like SOCRATES, and, mocking ÆSCULAPIUS with all his tribe, wilfully seek his own dissolution.

THE problem of reforming the out-patient department of hospitals, and developing a healthy and creditable provident system of medical attendance on the wage-earning classes, still continues to exercise the minds of a large number of the profession. Twelve months ago, at a meeting held at the Society of Arts, a committee was appointed to report on the subject of assurance as applied to the treatment of the sick.

[1] Longmans and Co.

The meeting resolved that the future medical attendance on the poorer classes ought to be conducted on the principle of sick assurance, and that the attention of the governing bodies of hospitals and other public authorities be called to the necessity for some check on the indiscriminate provision of medical treatment at hospitals and dispensaries. The committee has been at work twelve months, and has elaborated a scheme which was discussed at a public meeting called for the purpose, on Tuesday, in the Society of Arts, and presided over by Sir SPENCER WELLS. The committee, for convenience, divided its work into two parts: 1. The preparation of a scheme for medical attendance on the industrial classes in the metropolis, to be self-supporting and acceptable to the medical profession 2. The consideration of the desirability of forming a union between the hospitals and dispensaries in each district of London. We shall first briefly describe the chief points of the scheme of attendance. (1) All members to be approved by the medical officer under whom they wish to be placed. (2) A registration fee of one shilling. (3) The rates of contribution to be: single person, 6*d*. per month; man and wife, not having children, 1*s*. per month; man and wife, having children, 10*d*. per month; each child under sixteen to pay 3*d*. per month, not charging for more than four in a family. Persons joining to declare that their average wages do not exceed 30*s*., or that of the family 40*s*. per week; if domestic servants, their wages not to exceed £15 per annum. Special rules are suggested for persons requiring immediate attendance, and for persons who, on account of exceptional delicacy of health, cannot, with fairness to the medical officers, be admitted as provident members at ordinary rates. The scheme urges that each dispensary be "as far as possible" self-supporting, and that all the medical men in a district be invited to a conference with representatives of local general hospitals, and have power to elect a certain number of representatives on a provisional committee. The second part of the committee's work was a series of resolutions providing for friendly co-operation of hospitals with provident dispensaries, the object being to induce hospital authorities to relegate a large proportion of their out-patients to neighbouring provident dispensaries; to give patients of provident dispensaries with grave diseases and needing hospital treatment ready and certain means of obtaining it, for the mutual advantage of the hospital and of the patient; and finally providing for the use of the dispensaries, under certain restrictions, by students as a field for the study of common diseases.

Such are the principal features of the scheme, which represents a good deal of labour and trouble and a great many meetings on the part of the committee. It will be seen by the report of the meeting in another page that the scheme in its two parts was accepted by a large majority of the meeting, in spite of the opposition of a small minority. It is not pretended, of course, that the remuneration is adequate, though it is better than that of many schemes of private dispensary practice attended with every humiliation of advertisement and low charges, and as a working scheme for the metropolis, where so much gratuitous advice is to be had without adequate check on abuse. Besides, the rate of payment is not necessarily more than a suggestion for a *minimum* rate; it can be raised at any dispensary according to the discretion of the local committee. It is undeniable that a systematic periodical payment suits many persons who would not find it easy to pay medical bills, and there is no blinking the fact that the working classes in London have to be educated out of the notion that they are to have a physician and medicine without payment. The scheme of the committee is on the lines of the best provident dispensaries. There is a guinea midwifery fee; there is a strict wages limit, and the remuneration to the medical men is infinitely better than that of many co-operating medical societies. If the committee could bring the authorities of hospitals to a hearty acceptance of the part of the scheme which requires the co-operation of hospitals with provident dispensaries, they would do more for hospitals and provident dispensaries than all previous movements for establishing these institutions in the favour of the public.

IN spite of the abundance and nature of the evidence adduced of late years in support of the contention that pneumonia is to be regarded as a specific infectious disorder rather than a disease due to exposure, the argument is not all on one side. Dr. SEIBERT of New York has on more than one occasion forcibly drawn attention to the close relationship that prevails between the occurrence of pneumonia and certain meteorological states, of which the relative humidity of the air is foremost; and his contention has never been satisfactorily answered. A similar line of reasoning is adopted by Dr. BAKER, of Lansing, Michigan, who, in drawing his conclusions, has availed himself of the statistical method to so large an extent as almost to preclude those fallacies which beset the use of this method in its application to disease. In Michigan State there has prevailed for several years a system of registration or notification of disease, whereby returns are made every week by practitioners to the State Board of Health of cases of illness that have occurred in their practice; and by a comparison of such returns, together with the meteorological reports which are made daily in all parts of the State, Dr. BAKER has constructed curves of the monthly incidence of pneumonia as compared with the temperature variations, on the average of the past eight years. The result is a close correspondence in the occurrence of pneumonia and a falling temperature, the only difference being an almost uniform interval of one month between the two curves—i.e., the highest number of cases of pneumonia being reported a month later than the lowest recorded temperature. An almost precisely similar parallelism between the disease and the temperature was shown by Dr. BAKER to obtain in respect to the statistics of the United States army during the war, in the mortality from pneumonia in London during thirty years, and also in the prevalence of bronchitis in Michigan; so that from this enormous field it seems clearly to issue that there is a constant relationship between the disease and the temperature, and, consequently, with the absolute humidity of the air, which varies with the temperature. Granting this as proved, it still remains to explain how the condition of the air inhaled can cause pulmonary inflammation. The old and almost (up to within very recent times) universally accepted notion that pneumonia is caused by sudden changes

of temperature is not at first reconcilable with the fact that pneumonia prevails more in cold seasons, when such sudden atmospheric changes are less common than in warmer seasons; but it is quite consistent with the fact that in cold weather individuals are always exposed to great variations owing to the difference in temperature between the in-door and out-door atmosphere. Nevertheless, the ancient doctrine of "chill," even when explained by the light of modern physiology as operating through disturbance of the vaso-motor system, and thus producing local hyperæmia of one or other part of organ of the body, is not an adequate explanation. "Congestion" is one of those shibboleths, which are made to cover a great deal of ignorance. Even if local congestions do thus occur, between them and the inflammatory process there is a wide gulf. Hyperæmia may be a stage of inflammation, but inflammation is not the necessary consequence of hyperæmia. As regards pneumonia, it would seem that it is absolutely essential to seek for another factor in its causation over and above mere chilling of the surface and the resulting vaso-motor disturbance; and this factor has been sought in the introduction into the lung of some peculiarly irritating substance. At one time it was thought (e.g., by Dr. DAY of Stafford) that ozone was this substance, but this notion has not been maintained, having but little to support it. Dr. BAKER now advances an even simpler explanation, which involves a relation to the absolute (not the relative) humidity of the air. He points out that since in dry and cold seasons there is a greater exhalation of watery vapour, there must be a tendency under such conditions to the accumulation of non-volatile salts, as chloride of sodium, in the air passages of the lungs. Five-and-thirty years ago Dr. BEALE showed that the pneumonic lung contained an excess of chloride of sodium, and it has generally been thought that this explained the disappearance of that salt from the urine during the progress of hepatisation. But Dr. BAKER does not regard the matter solely from this point of view, and suggests that the presence of this excess of salt operates in exciting exosmosis of serum from the bloodvessels into the air-cells. Clearly, however, this theory is by itself insufficient, as it leaves just as much unexplained as ever the preference of one lobe or lung over another as the seat of hepatisation. As a theory, it has the merit of advancing us one step beyond the mere "chill" doctrine, and is capable of extension to the etiology of bronchitis and broncho-pneumonia as well as of croupous pneumonia. Dr. BAKER, indeed, asks whether the reason of the greater prevalence of pneumonia in warm climates than in cold may not be due to the greater consumption of salt in the former than in the latter, where this article is not needed for the preservation of food. Nevertheless, we find it difficult to admit such a view as a final explanation, which involves, it will be seen, a relegation of the pneumonococcus to the position of an epiphyte; but at the same time every suggestion that aids in the simplification of ideas upon etiology should be welcomed; and the painstaking labour of Dr. BAKER in compiling statistics of pneumonia in relation to meteorological conditions deserves the fullest recognition.

Annotations.

"Ne quid nimis."

ARMY MEDICAL STAFF.

A SOCIETY JOURNAL has just made a savage onslaught on the army medical officers, because, forsooth, in the opinion of the writer of the article, the medical administration is "not only wasteful, but grossly inefficient." This Rip van Winkle appears suddenly to have awakened from a sleep of a quarter of a century's duration, for he believes the whole duty of the army doctors to be to "physic soldiers in the time of peace, and dress their wounds in time of war." He does not appear to have the most remote idea that such a thing as sanitary science exists, and has been cultivated in the army with a success which certainly entitles the officers of the department to great credit. His description of the life of our army medical officer as one "of ease, comfort, and idleness" is very far from the truth. We believe there is no branch of the service which works harder, or has a larger proportion of service in unhealthy climates, than the medical. His description of the medical "officer in a particularly gaudy uniform strutting down the high street of his garrison town" may have been true in the period before the commencement of his long sleep, but it is certainly not applicable to the present day; nor is his remark about the Army Medical Department breaking down in war at all nearer the truth, as was clearly shown at the inquiry presided over by Lord Morley in 1883. The suggestion made by the writer of the article to put the army doctor "on the same footing as the army chaplain, who does his work very well, and very cheaply too," would, if carried out, be most disastrous to the soldiers, for if cheapness is to be the important factor there can be no doubt that the medical staff would then be filled, if filled at all, only by those who were failures in civil life. Cheap they might be as regards money, but extravagantly dear as measured by the lives and health of the soldiers. We have quite as little sympathy as the writer of the article for those medical officers who "are for ever complaining about their 'position' and rank as compared with that of military officers"; but we differ from him in this, that while he would make the remark applicable to the whole department, we believe it to be so only to a small minority. The whole tone of the article gives rise to a strong impression that it has been inspired by those who raised such an unjustifiable outcry at the time of the Egyptian expedition, and who can hardly be expected to forget the signal defeat they experienced in the inquiry then instituted into the working of the departments. It also savours of the hostile feeling towards the medical officers which has on all convenient opportunities been manifested by a certain coterie at the Horse Guards, and which, we had trusted, might be considered among the errors of the past.

THE BLOOD IN DIABETES.

PROFESSOR LÉPINE has lately recorded in the *Revue de Médecine* a case of diabetes which terminated fatally in coma, and in which, for the first time, it was positively shown that in this state the blood loses its alkaline reaction. As far back as 1883, at the debate on diabetes at the Pathological Society, Dr. Ralfe first drew attention to the fact that the symptoms of diabetic coma were not unlike those produced in animals poisoned by an injection of acids into their veins, or whenever attempts were made to diminish the alkalinity of the blood by other means; whence the speaker inferred that the poison concerned was of an *acid* nature, which by decomposition in the urine became converted into acetone. This idea of "acid intoxication" has since

been generally adopted, and Minskowski has discovered the presence of an acid (oxybutyric) in diabetic urines which is capable of breaking up in aceto-acetic acid, and thus furnishing acetone. This acid does not, perhaps, exist in the blood and tissues in a free state, but is probably combined with some base with which it forms an acid salt. In Professor Lépine's case, intravenous injection of a saline fluid containing about an ounce each of sodium chloride and sodium bicarbonate to three pints of water was employed when the coma first set in. After this there was some immediate improvement from the coma, the pulse rallied, the temperature rose from 96° to 97·5° F., and the patient could speak, but not swallow. Twelve hours afterwards venesection was employed prior to the trial of a fresh injection, when it was found, in spite of the previous injection of a large quantity of alkali, the reaction of the blood was neutral—a clear proof, Professor Lépine thinks, of the acid nature of the disease, and its power to destroy the normal alkalinity of the blood. It may be a question, however, whether the injection of an alkaline bicarbonate into the blood in diabetic coma is a right procedure, for though the reaction of the salt is alkaline, yet its constitution is acid, and, as Dr. Ralfe pointed out some years ago, probably acts as an acid salt in its decomposition with other salts in the body, and so actually tends, after the immediate effect of its alkalinity has passed off, to diminish the alkalinity of the blood. Should this on further inquiry prove correct, it might be advisable to employ neutral sodium phosphate instead of the acid sodium carbonate for intravenous injections.

SCHOOL FEES DURING SICKNESS.

THE case of appeal heard in the Queen's Bench Division against the decision of a County Court judge, who had awarded a schoolmaster compensation for the removal of pupils by a parent on the occurrence of two mild cases of scarlet fever in the school, is of considerable interest to all parents. The congregation of large numbers of children in either private or public schools renders the occurrence of the acute infectious diseases of childhood almost inevitable from time to time, however thorough the precautions of the master may be. It would be unreasonable to expect the schoolmaster to bear the whole loss of such occurrences, especially if evidence is forthcoming that he has exercised all reasonable precautions to guard against the introduction of infectious illness among his pupils. But he might fairly be expected to share with the parent some of the loss that ensues from the removal of a pupil during convalescence, or the withdrawal of non-infected pupils on a threatened outbreak. A parent has of course a perfect right to remove a pupil, and the master has an equal right to stipulate the terms on which he is willing to accept pupils. To lessen the occasional friction between schoolmasters and parents a definite understanding should be arrived at at the commencement of the pupil's career. All parents should stipulate that on the occurrence of any outbreak of infectious illness they should be candidly informed of the nature and extent of the outbreak, nor should they be kept in ignorance of an isolated case. If the withdrawal of uninfected pupils is not considered necessary by the public medical officer of health in whose district the school is located, and the parent nevertheless decides to withdraw a pupil, the schoolmaster could scarcely be expected to incur loss thereby; but if, on the other hand, it is considered desirable, either from the extent or nature of the outbreak, to disperse the pupils, the master may fairly be expected to remit a portion of the school fees. His loss under these circumstances would be considerable, and so would the parents'; for the latter must make provision of a more or less costly nature for the care of a child during the period of the possible incubation of the disease to which the outbreak at school has exposed him. Some definite rule should be established at our public schools on these points, which would be a guide to private schoolmasters. A remission of one-third or half the school fees, according to circumstances, might reasonably be expected whenever the withdrawal of a pupil is considered desirable by the public medical officer of health.

TREATMENT OF HEPATIC COLIC.

OLIVE oil in large quantity is vaunted as a certain cure for hepatic colic due to gall-stones. Dr. Just Touatre of New Orleans has written an interesting account of self-cure of biliary colic and gall-stones, in the second number of a bi-monthly Roumanian journal (*Archives Roumanies de Médecine et de Chirurgie*), whose editor is M. Georges Assaky. The method of procedure was as follows: At seven in the evening a blue pill of the weight of 15 centigrammes was taken, and this was followed twelve hours later by the taking in one draught of twelve tablespoonfuls of olive oil; a quarter of an hour later a similar dose of olive oil was taken, and then the patient addressed himself to sleep on his right side. At nine o'clock the blue pill acted, producing a copious biliary evacuation, but no gall-stones. Three o'clock in the afternoon saw another bilious stool without stones, but from seven in the evening till midnight six stools were passed; the first two contained seventeen calculi of the size of a large pea of conical shape, greyish-yellow aspect, and soft consistence. Altogether sixty stones were evacuated, and six of these had the volume of an olive, and were of a black colour. The passage of these calculi by the cystic and biliary canals was for the most part unattended with pain, a few spasms being felt probably at the time of the movement of the large calculi. An inexpressible relief was obtained from the pains over the liver and shoulder, which had previously caused much distress; the liver also diminished in size. For three months Dr. Touatre enjoyed perfect health, when the trouble commenced again; the olive oil was repeated in similar fashion, and with the result that eighteen more calculi were discharged by the bowel. Since then he has enjoyed excellent health. He admits that some courage is required to swallow the large doses of olive oil.

FEVER IN LONDON.

IN our last issue we noted the temporary increase of scarlet fever during the week ending November 25th, and pointed out that this increase corresponded with the experience of past years. The number of cases admitted that week into the hospitals of the Metropolitan Asylums Board was 191, and during the subsequent week ending Dec. 2nd the fresh admissions numbered 173, showing the return to a general decline. This decline should be more marked during December, so that by the middle of January the number of fresh attacks should not be in excess of the average during the year. The published returns of the last few days show that this result is likely to be attained. The vacant beds on Dec. 7th were 204 in number, in addition to which there were twenty-five beds reserved for special isolation. The opinion we expressed as to the absence of necessity for the newly ordered hospital accommodation was therefore well founded. During last week fifteen cases of enteric fever were admitted into the hospitals, as against twenty-six in the preceding week. Small-pox contributed three cases, one from the Wandsworth and two from the Poplar districts. At the meeting of the Asylums Board which was held last Saturday, Deputy Inspector-General Bostock called attention to the fact that a gentleman living in Paddington had applied at the Fulham Hospital for the admission of his two sons, who were suffering from fever, and on being informed that the hospital had no wards for paying patients, he obtained an

ambulance from the ambulance station, and thus procured their removal. The circumstance is important as affording further illustration that the hospitals are regarded as the means of isolation not only of poor persons, but of cases of fever occurring in all classes of society. A report of the General Purposes Committee was brought forward by Mr. Scovell, dealing with the reply of the Local Government Board to the Managers' application for authority to remove to their hospitals all persons suffering from fever or small-pox, whose removal should be sought by duly qualified medical practitioners. It will be recollected that the Local Government Board were of opinion that they had no authority to issue such an order, but they pointed out that under certain circumstances the Managers were authorised to receive persons who presented themselves at the hospital gates. The Managers at their last meeting, determined to explain to the Local Government Board that the difficulty under which they suffered was with regard to the admission of cases in the Managers' ambulances, and that 40 per cent. of the patients recently admitted had been received without an order from a relieving officer or master of a workhouse. They therefore desired to impress upon the Board the absolute necessity of taking steps without further delay to obtain from Parliament such powers as would directly authorise the Managers to remove to their hospitals all persons suffering from fever or small-pox, whose removal should be applied for by duly qualified medical practitioners.

THE ELECTRICAL PHENOMENA OF THE SALIVARY GLANDS.

THE electrical phenomena accompanying the excitation of so-called secretory and trophic nerve fibres in the salivary glands of the dog and cat have been studied by Mr. Rose Bradford in the Physiological Laboratory of University College, London. This observer, with Mr. Bayliss, had previously found that in the dog excitation of the chorda tympani caused a large variation, indicating the surface of the gland to become negative to the hilus; and excitation of the sympathetic caused the outer surface to become positive to the hilus, this variation being neither so rapid nor so great as is effected by excitation of the chorda. In the cat excitation of the chorda or of the sympathetic caused a diaphasic variation. Finally, in the parotid of the dog excitation of the tympanic plexus caused the surface of the gland to become negative to the hilus, and excitation of the sympathetic caused the surface to become positive to the hilus. It seemed desirable, as these results were very constant and definite, to continue the work and try to determine, if possible, which of the many changes that occur during the activity of these glands are concerned in the production of the electrical phenomena. In the communication published in the Collected Papers (No. 6) from the Physiological Laboratory of University College, London, Mr. Bradford brings forward evidence to show that the electrical variation of these salivary glands is not directly connected with the vaso-motor changes resulting from excitation. It is concluded that a flow of secretion is intimately connected with a certain definite electrical variation. The first phase is probably due to one or more of the following three causes: (1) the actual movement of the fluid through the cells and ducts; (2) the change in the gland cells which presumably precedes the passage of blood through them; (3) the anabolic changes that are supposed by some observers to follow the excitation of secretory fibres. Mr. Bradford concludes that there is not sufficient evidence to show that the first phase is due to anabolic changes; whereas there is a very considerable mass of facts to show that it is connected with the flow of liquid. The difficulty of estimating the latent period of the actual secretion makes it uncertain whether the variation accompanies or precedes the flow. Evidence is adduced tending to show that the passage of the fluid through the ducts is not the cause of the electrical effects. Hence the first phase is due probably either to the passage of the fluid part of the secretion through the walls of the alveoli, or to the changes in the gland structures that follow the excitation of a secretory nerve and precede the actual flow. The second phase is most likely to be ascribed to the changes in the gland cells leading to the elaboration of the organic constituents of the saliva.

THE CAUSE AND PREVENTION OF FOG.

THE fog of London and of other large towns, it is probable, presents to the minds of the majority of those who suffer from it an idea not much less hazy than the aspect with which it confronts and bewilders their sense of vision. Comparatively few of the afflicted care to inquire into the composition of their tormentor, or even to define its cause with accuracy. They may be aware that it is not all river damp, nor yet all smoke; but the subtleties of chemical analysis, however interesting to the professional inquirer, are for most men lost in a general feeling of present discomfort, which is tangibly aggressive, unfathomable, and unavoidable. Sir Douglas Galton, however, is not one of those who accept the mystery as such, and still less is he disposed to let ill alone and endure what has not yet been cured. At the Parkes Museum a few days ago he discussed at some length the composition, origin, and practical treatment of this master evil of town life. Fortunately his discourse did not partake of the nature of its subject; but, after traversing the details of theory, he was able to point his hearers to certain definite facts of causation, and to advocate remedial measures, which if carried out would doubtless prove to a certain extent effectual. According to Sir D. Galton's estimate, the fog-laden air of London contains four times as much carbonic acid as its ordinary atmosphere. It has been proposed to meet the difficulty by substituting the use of gas for that of coal in cooking and other domestic operations. To some extent this change has been carried out, and we shall probably see it in still wider exercise. A considerable period must elapse, however, before the open fire is done away with in favour of a stove—if, indeed, that day should ever come.

THE REGISTRATION OF PLUMBERS.

AT a dinner of the Company of Plumbers on Dec. 1st, the Master, Mr. F. Machin, was able to give a very satisfactory account of the progress which the Company had made in the examination and registration of efficient plumbers. During the two years in which this duty had been undertaken, as many as 1185 different craftsmen had been registered, the efficiency of these plumbers having been established after careful scrutiny of evidence tendered, the examination of certificates and indentures, and even after absolute practical examination. As many as 753 of the successful candidates were journeymen, many of whom were employed in all parts of the country. With a view to extending this movement to the provinces, local organisations had been formed, and every care was taken to ensure that no local bias should prejudice any candidate. Sir James Paget, in proposing the toast, "Prosperity to Technical Education," dwelt upon the decadence of the system of apprenticeship, and pointed out the need for it to be replaced by technical education, which was spreading over the whole country, and of which the Company had been one of the chief promoters. The progress of science and discovery, he said, had been so great that it was impossible that a man who had been instructed a quarter of a century ago could himself instruct

an apprentice now in all that was necessary in the course of one profession. The dinner was well attended, among the guests being several medical officers of health. We hear with pleasure of the progress of this movement. The relation which exists between disease and house conditions is daily becoming more recognised, and the main difficulty which has to be overcome is that of the dearth of artisans competent to carry out work in a manner in accordance with the requirements of health. Only recently we have heard that the death of Lady March has been attributed to her having slept in a bedroom which was adjoining a bath-room in which was found an untrapped drain communicating with the sewer. Under good bye-laws and with efficient workmanship calamities such as these in newly built houses would be impossible. But there is still much to be done in the reconstruction of old houses, and there is the greater need for the technical instruction of persons engaged in plumbing and the allied trades.

TREPHINING IN EPILEPSY.

ALL cases of successful cerebral surgery are at present of considerable interest, especially those cases in which procedures are taken for the relief of epileptiform convulsions. In the case which Dr. Oliver of Newcastle-on-Tyne has recently recorded, the interval of time which has elapsed since the operation was performed without the recurrence of the epileptiform seizure makes it probable that the relief afforded by the operation may be judged complete. In this case the epileptiform convulsions came on about a fortnight after an injury to the head in a young and previously healthy lad. After their first development he suffered from them almost daily, whilst he also complained of a painful spot on the right side of the head, a little above and anterior to the ear, which always became more painful just before and often soon after a fit. After a more severe fit than usual the patient would remain powerless for two or three days, as well as being deaf and unable to speak. In these severe attacks it was noticed that the convulsions were more marked on the right than on the left side. Medicinal treatment having been giving a fair trial, it was determined by Dr. Oliver, after consultation with his surgical colleague, to trephine the skull over the painful spot. The moment the bone was elevated the dura mater pressed up through the wound, becoming extremely tense. An incision was then made, and a few teaspoonfuls of serum containing shreds of fibrin gushed out. The membranes and surface of the brain were quite healthy. For about a day after the operation serum continued to escape from the wound in the dura mater, amounting in all to about two or three ounces. Two or three fits occurred on the day of the operation and the day subsequent to it. By degrees, however, days, then weeks, and latterly months, passed without the occurrence of any fit at all. Afterwards the patient was engaged as a clerk, and was confined in a heated atmosphere and had long hours at business. One evening, after a period of six months, he had a fit, but without loss of consciousness, and for a few days after this he had some minor seizures, but these speedily yielded to treatment, and for a period of six months, the date of Dr. Oliver's report, no fit of any kind has again recurred. A somewhat similar case has also been under our observation, in which, however, the epilepsy developed gradually after trephining for a traumatic injury. On opening the wound, a spicula of necrosed bone was removed, and afterwards the convulsive seizures gradually disappeared. It has been urged by some, however, that though some present relief may be gained for a time, the convulsive seizures return sooner or later. However that may be, and a wider experience must be acquired before the point can be definitely settled, still to have obtained almost a complete immunity from attacks that were rendering life a burden to the patient, and even threatening to shorten existence, was a great success; whilst the fact that in Dr. Oliver's case the patient was able to employ himself in such a responsible situation as he did, and for so long a time, leads us to think that, in this case at least, a permanent cure may have been effected.

WORKING HOURS ON THE RAILWAY.

IT is a matter of notoriety that some of the most pronounced examples of overwork have been, and continue to be, furnished by the experience of railway *employés*. That accidents occur from time to time which are more or less directly attributable to mismanagement in this particular is not remarkable. The wonder rather is that we do not oftener hear of them. We are not ignorant that on the railway the observance of a settled scale of working hours is at times a somewhat difficult matter. The length of journeys, unexpected delays from weather and the like, the utility of special aptitudes possessed by particular men and required at a given time, are some of the circumstances which may render the due allotment of time for purposes of work a matter for careful consideration. When, however, we find men employed on trains in the most responsible positions for more than thirty hours at a stretch we are surely justified in crediting their superiors with most culpable negligence. Necessity is said to have no law, and on this principle it seems to be assumed that the driver of a locomotive should be virtually a part of his machine. We fail to see the point, and the public, we are assured, will hardly allow that the personal risk which they incur by such a proceeding can be excused by the maintenance of a solid dividend for the benefit of shareholders. What is wanted is a larger staff of subordinate officials, who shall be available to relieve one another at reasonable intervals. An ordinary working period of twelve hours per day is, we take it, sufficiently long for this class of workmen, as well as for artisans engaged in other occupations.

EXTIRPATION OF THE LARYNX.

AT a recent meeting of the Berlin Medical Society, Dr. Hahn gave a demonstration of specimens of laryngeal carcinoma from cases in which he had excised the whole or a portion of the larynx, and at the same time summed up the ultimate results of his operations. He had performed extirpation, partial or total, in fifteen cases. Two of these are to be considered as cured; one was operated upon seven years ago, being then sixty-nine years of age, and he is still living and well. The operation involved the removal of the cricoid cartilage, the greater part of the thyroid, and part of the hyoid bone and epiglottis, the disease being one of carcinoma keratodes. The other patient was operated upon in May, 1886; here the disease was limited, and the removal confined to one-half the larynx. Dr. Semon, under whose care this patient is, wrote to Dr. Hahn that a small prominence had appeared at the site of the tracheotomy wound, which it is hoped is only a keloid of the cicatrix, but it would of course be carefully observed. A later report from Dr. Semon said that it had undergone no change. Of the remaining cases, there was only one of which Dr. Hahn had no recent information but the last accounts were very unfavourable. All the others were known to be dead; but it must be remembered that in all the cases, with the exception of the one alluded to above, the operation had been resorted to late in the course of the disease. He had that day (Nov. 16th) operated on a patient only thirty-six years of age, the youngest of his cases, whose ages ranged from forty to sixty-nine—mostly over

forty years. This patient had been suffering from laryngeal trouble for a year, and had been under the care of Dr. Krause. The diagnosis of carcinoma was made by the microscope, and a unilateral excision was performed. (On the 28th Dr. Hahn reports that this case was doing well.) Amongst the preparations which Dr. Hahn showed at the meeting was one where there had been nine previous operations for recurrence of the growth within the space of eighteen months; yet even to the end the lymphatic glands were never involved in this case. Indeed, he remarked that lymphatic infection is unusually late in laryngeal cancer. The most favourable cases are those of carcinoma keratodes; the least, the softer and infiltrating forms. The latter cases had better not be treated by excision of the larynx, but reserved for tracheotomy when occasion arises.

THE ALLEGED CANCER BACILLUS.

THE grounds adduced by Dr. Scheurlen in support of the contention that he has discovered the cancer bacillus were stated in his communication to the Verein für innere Medicin on the 28th ult. The material employed consisted in specimens of mammary cancer removed at operations, and in some post-mortem specimens of cancer of the breast, uterus, liver, and other parts. The tumours were washed in sublimate solution, and the "cancer juice" scraped off the freshly-cut surfaces by means of a sterilised knife. The culture media included pleuritic serous fluid, agar-agar, gelatine, and potato, which were inoculated in the usual way. The bacterial growth was very rapid, forming colourless films on the surface of the fluid, these films gradually assuming a brownish-yellow colour. They were found to consist of bacilli 1·5μ to 2·5μ long by 0·5μ wide, long ovoids, and spore-bearing. They stained readily with various reagents. No bacilli were found in sections of the tumours, but in cover-glass preparations of the "juice" they occurred, some of them within the cells. Six bitches were inoculated in one of the mammary glands, and in two which had died swellings had formed at the seat of inoculation, which swellings consisted of granulation cells and epithelioid cells, together with the bacilli. In the discussion on the paper, Dr. P. Guttmann believed that the case had been proved, but Dr. A. Fränkel criticised it adversely, pointing out that the very rapid growth of the bacilli was against their pathogenic character, and that degenerate cells formed a favourable nidus for bacterial contamination.

THE TOXIC ACTION OF PUTREFACTIVE MATTER.

DR. KOSOROTOFF has been engaged in making researches on the toxic action of putrid substances in Prof. Pashutin's laboratory, and publishes an account of his observations as a "preliminary communication" in some recent numbers of the *Vrach*. Cultures of bacterium termo were prepared from infusions of meat and of kidney beans. With these carefully sterilised saline solutions containing acetate of ammonia, phosphate of potash, sulphate of magnesia, and chlorate of potash, as used by Naegeli, were sown under four distinct sets of conditions. In the first series air was made to bubble constantly through the solution. Here a change was soon apparent, the solution becoming opalescent in ten or twelve hours and quite opaque in twenty-four hours. In the second series the tubes were covered with blotting-paper and were agitated daily. Here the microbes developed, but much more slowly than in the first series. In the third and fourth series air was rigidly excluded, with the result that no opalescence was observed till the fourth or sixth day. Experiments were first made with the microbes themselves, which were injected under the skin and into the veins of dogs. No injurious effects, local or general, were produced. The saline solutions in which the microbes had developed were then introduced in like manner into the circulation of animals. A marked difference was observed between the behaviour of the solutions to which air had had access and those which had been kept closed up. Thus, dogs into whose veins the first or second series of solutions were injected suffered from pyrexia, dyspnœa, vomiting, and diarrhœa with watery or bloody stools; but the general appearance of the animal and the condition of its nervous system was but little affected. The lethal dose of a solution which had been kept for from two to four weeks was ten cubic centimetres per kilogramme of weight. The post-mortem appearances were those of hæmorrhagic gastro-enteritis, with ecchymoses on the serous membranes and some fulness of the cerebral vessels. Under the influence of solutions in which cultures had been developed without access of air, a very different set of symptoms was produced. The animals became at first restless and excited, and afterwards fell into a typhoid condition, being unable to stand, the pupils dilating and consciousness being lost. The temperature fell, sometimes to a considerable extent. All the cases proved fatal, though in some only a very small quantity of the fluid was injected into the veins. The post-mortem examination showed a remarkable fulness of the vessels of the brain and its membranes, with extensive ecchymoses of the latter. Dr. Kosorotoff came to the conclusion that the toxic matter was soluble in alcohol as well as water, and that it was a poison in a chemical sense, not an infectious contagium. He considered, too, that it must be due to synthetic rather than to decomposing action on the part of the microbes.

THE PENDJEH SORE IN SOUTH RUSSIA.

DR. ZVIAGINTSEFF, of Kherson, in South Russia, has met with some cases of cutaneous ulceration which appear to be identical with the disease described by Russians as "Pendjeh sore,"[1] and which is doubtless of the same nature as "Aleppo evil," Baghdad "date mark,"[2] Delhi boil, Lahore sore, &c. Dr. Zviagintseff employed a corrosive sublimate solution for washing the sores, and dressed them with iodoform powder and ointment, a layer of cotton wool being applied over all. In this way they gradually improved in appearance, and finally healed with a dark cicatrix. No bacteriological observations seem to have been made. Auto-inoculation gave a negative result. Dr. Pierson, of the Indian Medical Service, has remarked[3] that this sore is known under different names all along the north-western frontier. His experience was that the only effectual treatment was to apply nitric acid freely to the sore, and to open the small surrounding "nests" with the lancet, putting a tiny drop of concentrated nitric acid into the openings. He also calls attention to the fact that when these sores have existed for a long time they have a permanent dull-brown stain, which renders them liable to be mistaken for syphilitic ulcers.

SMALL-POX AT LEICESTER.

WE are informed that the unvaccinated child whose case was the most serious in the recent outbreak of small-pox at Leicester is now doing well. Four other members of the family in which the disease appeared have been placed in the quarantine wards, one of whom has developed an abortive attack, and another on the 7th inst. showed what are feared to be premonitory symptoms. A few other persons in the town known to have been in the infected house are under strict surveillance and daily observation. One of these had also on the 7th inst. some suspicious malaise, pyrexia, &c., but there is not as yet any certainty whether the case will prove to be one of small-pox.

[1] See THE LANCET, April 10th, 1886.
[2] See a letter from Surg.-Major Pierson, THE LANCET, June 19th, 1887.
[3] THE LANCET, June 12th, 1886.

H.I.H. THE CROWN PRINCE OF GERMANY.

IT is stated that the physicians in attendance upon the Crown Prince are giving a trial to the treatment suggested by Dr. Freund of Vienna, and based on his analyses of the blood of patients suffering from cancer which showed an excess of sugar. By a rigid exclusion of sugar from the diet, and the substitution of saccharin, it is attempted to reduce the amount of sugar in the blood, and by that means to prevent the malignant growth. Dr. Freund's views have not won general acceptance, and one fact which is strongly adverse to them is that the subjects of diabetes mellitus are not specially liable to be attacked by cancer. We are glad to learn that there has been an improvement noted in the Crown Prince's condition during the last fortnight, and we hope it may continue. The period of improvement corresponds with the adoption of Freund's treatment, and very naturally this has excited hopes that a further continuance of it may be attended with still greater success. Too much stress must not be laid upon daily bulletins in such a case. The daily variations are difficult to appreciate, and the desire to detect improvement is very strong. More trustworthy results are obtained when the progress of a case is tested by careful examinations of the local changes at intervals of two or three weeks.

THE LIQUOR AMNII AND FŒTAL NOURISHMENT.

DR. OPITZ of Chemnitz, in reply to Dr. Ott, who holds that the liquor amnii is concerned in the nutrition of the fœtus, brings forward a case of malformation which is preserved in the museum of the municipal hospital in Chemnitz, which seems to show that the nutrition of the fœtus must be independent of the liquor amnii. An apparently healthy and well-formed child was born, which respired normally and passed meconium and urine. It also sucked, but immediately brought up the milk in a frothy condition. A gum-elastic catheter was introduced into the œsophagus, but it could only be passed as far as the cricoid cartilage, consequently some obstruction of the œsophagus was diagnosed. The child lived six days. At the post-mortem examination it was found that the œsophagus ended abruptly in its middle third. The stomach was filled with meconium. A fine probe could be passed through the cardiac orifice into the trachea.

BIRMINGHAM MEDICAL INSTITUTE: POST-GRADUATE LECTURES.

THREE courses have been arranged for the present winter session. The first of the series, consisting of three lectures on some of the Diseases of the Skin, was delivered by Dr. R. M. Simon, at the Institute, during the month of November. The lectures were illustrated by plates, microscopic specimens, preparations used in treatment, and by the exhibition of living cases. The attendance was very good, and afforded evidence of the satisfactory treatment of his subject by the lecturer.

HEREDITY AND NURTURE.

IN his second lecture at South Kensington, Mr. Francis Galton concerned himself mainly with the limits to the inheritance of ancestral peculiarities, and to the hereditary transmission of disease. He employed a metaphor of vegetation on two islands spreading over adjacent islets, to illustrate family likeness and family differences, stability of type in a population, silent transmission of ancestral characteristics, and blended and mutually exclusive heritages. He explained how laws of inheritance enable us to forecast "schemes" of children, grandchildren, nephews, &c., but do not accurately determine the place of individuals in their respective schemes. In this connexion he exhibited two interesting mechanical arrangements, by means of which the probable heights of male or female children could be determined from the known heights of the parents. In conclusion, he showed the close agreement between the results obtained by himself and by Dr. Reginald Thompson as to the numerical valuation of heredity in the production of phthisis.

PASTEUR'S METHOD SIMPLIFIED.

DR. HÖGYES of Buda-Pesth has published in the *Orvosi Hetilap* an account of some researches he has made on the protection of dogs from rabies by a somewhat simpler method than that employed by Pasteur. He, too, makes use of the spinal cord of an infected rabbit, but instead of drying it to a gradually increasing extent to obtain various degrees of activity, he merely rubs it up with water containing chloride of sodium so as to make solutions varying in strength from 1-10th to 1-5000th. The dog to be protected is injected successively with these, beginning with the weakest. The results appeared to be quite satisfactory, and a complete immunity from rabies to be secured by six of these injections.

ROYAL CORNWALL INFIRMARY.

We regret to learn that the Royal Cornwall Infirmary at Truro still remains without a physician on its staff. About two years ago, on the occurrence of a vacancy, Dr. Williams was appointed to fill the office; but in a short time he resigned it owing to a misunderstanding between himself and the house committee respecting the selection of in-patients. No steps have since been taken to provide the institution with a physician, which must surely be not only a distinct disadvantage to the infirmary itself, if not in direct violation of its bye-laws, but also indirectly a loss to the district.

DIPHTHERIA DURING PREGNANCY.

DR. KOROTKEVICH mentions in the *Russkaya Meditsina* the case of a peasant woman in the fifth month of pregnancy who was attacked by diphtheria during an epidemic which prevailed in the early part of the present year. A child of hers died of the disease. She was treated by means of local applications of salicylic acid and benzoic acid, and recovered in nine days. She was confined at term of a weakly boy. Dr. Korotkevich has only been able to find four cases of diphtheria during pregnancy reported, one by Olivier and three by Dr. Sochaff, who published a paper on the subject in the *Vrach* in 1883.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign medical and scientific men are announced:—Dr. Karl Dantscher, formerly Professor of Anatomy in the University of Innsbruck, at the age of seventy-five.—Dr. Johanes Nicolaas Ramaer, a distinguished Dutch alienist.

THE PERSPIRATION.

THE result of elaborate research made by M. Peiper yields the following conclusions: The perspiration is more concentrated on the right side of the body; this observation is in accordance with that of Reinhardt; it would be interesting to know whether the opposite was the case in the left-handed. The palm of the hand sweats four times more than the skin of the chest, and the cheeks one and a half times as much. There is a slow increase in the sweat in the afternoon, especially obvious from 8 to 12 o'clock at night. After midnight there is a diminution. Feeding has but little influence on this function. Elevation of the surrounding temperature increases

the perspiration, and variations of the hygrometric state of the atmosphere have an immense influence on the function. The quantity of water evaporated in a quarter of an hour from a cutaneous surface 25 centimetres square, in a normal individual, is about ·176 of a gramme. In infants the quantity is generally less than in adults. The weight of the body and sex have no marked influence on the perspiration.

THE OPERATIVE TREATMENT OF PERITONITIS.

DR. TRZEBICKY, writing in a Polish journal on the operative treatment of peritonitis, details experimental researches on sixty-seven dogs. From these he concludes that operative treatment is indicated in cases of purulent or septic peritonitis; that the employment of different antiseptic substances leads to results differing from one another. The most suitable liquid for washing out the peritoneal cavity appeared to be a solution of salicylic acid. The greatest care is necessary in cleansing the abdomen externally before the operation is commenced. Dr. Trzebicky does not find it easy to explain the variations in his results, but about the facts he has no doubt.

PATHOLOGICAL SOCIETY OF LONDON.

A SPECIAL MEETING of this Society will be held on Thursday, December 15th, at 8.30 P.M., to receive from Professor Crookshank a report upon an investigation into a Disease of Cows and its relation to Scarlatina in Man. The subject is likely to excite considerable discussion, and many new and important facts are, it is said, to be brought forward.

INFECTIOUS DISEASES COMMON TO MAN AND THE LOWER ANIMALS.

THE next meeting of the Epidemiological Society, which will be held on Dec. 14th, will be one of especial interest, Dr. Klein having promised to read a paper on some of the Infectious Diseases common to Man and the Lower Animals. We understand that the address will be illustrated by the exhibition of numerous microscopical preparations, and we presume that the more recent observations referred to in the reports of the Medical Officer of the Local Government Board will be discussed.

CARBOLIC INJECTIONS IN MALIGNANT PUSTULE.

DR. USPENSKI mentions in the *Meditsinskoe Obozrênie* that he has treated eleven cases of malignant pustule, with only one death, by means of carbolic injections, as recommended by Raimbert. He, however, used a stronger solution than one of 2 per cent., as employed by Raimbert, varying it from 4 to 5 per cent. according to the degree of pyrexia and the gravity of the case. The same lotion was also applied to the pustule externally.

FOREIGN UNIVERSITY INTELLIGENCE.

Dorpat.—Dr. C. H. Löhlein, *privat-docent* in midwifery, is to be offered the chair of Midwifery, Gynæcology, and Diseases of Children, which will become vacant by the transference of Professor Runge to Gottingen.

Gottingen.—Dr. H. Schwartz, Professor of Midwifery and Gynæcology, is about to retire at the end of the current winter session. Professor Runge of Dorpat has been invited to accept the chair, and has consented to do so.

Innsbruck.—Dr. Kratter of Graz has been appointed Professor of Medical Jurisprudence.

MR. JONATHAN HUTCHINSON has promised to read an address at the annual meeting of the Cardiff Medical Society in January next.

WE have just received the report of the medical officer of the Local Government Board for the year 1886, being the supplement to the sixteenth annual report of the Local Government Board. It contains matter of exceptional interest. Among others, in addition to the medical officer's own report, are papers on the Statistics of Small-pox Incidence upon the Registration Districts of London relatively to the Operations of the Small-pox Hospitals in the Metropolis, by Mr. W. H. Power; a report by Dr. Klein on the Etiology of Scarlet Fever; a further paper on the Etiology and Pathology of Tuberculosis, by the same author and Mr. Lingard; and the results of investigations into the Causation of Diphtheria, by Dr. Gresswell, Dr. Turner, and Mr. Power. We propose to discuss these subjects at length in future numbers.

THE death is announced of Mr. James Stephens, F.R.C.S., a well-known Manchester surgeon, which took place on the 1st inst. at his residence, Bridge-street, in that city, where he had lived for upwards of seventy years. With the exception of Mr. John Boutflower, he was the oldest medical practitioner in Manchester, having succeeded to the practice of his uncle, the late Mr. Joseph Jordan, founder of the Manchester Medical School.

WE regret to announce the death on the 2nd inst. of Sir William Richard Edwin Smart, K.C.B., M.D., Inspector General of Hospitals and Fleets (retired), after a short illness, at the age of seventy. The deceased joined the naval medical service in 1841, and retired from it in 1877. We hope in our next issue to publish a more detailed account of Sir William's career.

THE Minutes of the recent session of the General Medical Council, with the revised Standing Orders of the Council appended, has been published, and may be obtained, price 3*s.* 6*d.*, by those interested in them.

UNIVERSITY OF LONDON.

THE following statement has been sent in to the Privy Council:—

University of London, W., 1887.

SIR,—I am directed by the Senate of the University to avail myself of the permission given by your letters of the 1st and 15th July, and to lay before my Lords of the Council the following statement on the petition of University and King's Colleges, London, praying for a University Charter:—

The intimate relation which has long subsisted between this University and these Colleges, and the important consequences which may follow in the event of their petition receiving Royal favour, have occupied the anxious attention of the Senate; and they believe that they would be greatly wanting in their duty to the institution placed under their guidance if they did not call to these subjects the attention of the Lords of the Council.

This University and University College, London, were first incorporated by Charters bearing the same date (Nov. 28th, 1836); and these Charters were beyond question parts of one plan, in which the duty of giving teaching of a University character was assigned to the College, and the duty of examining to the University. King's College, which had previously been constituted by Royal Charter, was also affiliated to the University. The affiliation of Colleges subsequently lost its importance, owing to the fact that by the provisions of the new Charter of 1858 attendance at an affiliated College was no longer required, and that the examination rooms of the University were thus thrown open to students wherever educated. University College has, nevertheless, remained in close relationship with the University, and has supplied many of the most distinguished graduates and examiners to the University, and many of its members have been and are members of the Senate; above all the curriculum of instruction in the College has generally followed the lines of the examinations in this University. The connexion between the two institutions has thus been of great value to the University; and the Senate believe that by placing before the College a wide curriculum and a high standard of excellence they have also conduced to the very high position to which the College has attained.

The same observations apply to King's College; but in a lesser degree, inasmuch as the course of that College has been more influenced by the older Universities.

The Senate believe that a serious injury would be done to higher education if these two great London Colleges were to be entirely separated from this University, and were to adapt their courses of teaching, not to the examinations of this University, but to those of a new University in which the authorities of those two Colleges would exercise a dominant influence.

If the precedent which was set, or is supposed to have been set, by the

grant of the Charter to the Victoria University were followed by the creation of a second University in London, the Senate believe that Her Majesty's Government would find it difficult from time to time to resist similar applications from other Colleges in the country. The Senate fear that the creation of numerous small Universities would be fraught with danger to the cause of the higher education, and that the competition of graduating bodies would probably, if not at once, yet in no very remote future, lower the standard of graduation in a way of which the history of Universities contains numerous examples.

The Senate believe that the work done by the University has been and is of the greatest value to education, not only amongst their own graduates, but even in the older Universities. The width of the subjects embraced, the thoroughness of the examinations, and, above all, the independence of the examiners from all undue influence of the teachers, have had a widespread effect; and the Senate would greatly regret if the extent of this good work were lessened in the future by the withdrawal of a large number of the students of the most eminent Colleges from the examination rooms of this University to those of smaller Universities, where the granting of degrees would be practically in the hands of the teachers, and where the evils which the system of this University has checked would be sure to reappear.

So far as the petition of the Colleges complains of the want of regular communication between the University and the teachers of the higher institutions, the Senate do not desire to call it in question. On the contrary, from a date long prior to the presentation of the petition, or any proposal to present such a petition, both the Senate and the Convocation of this University have been engaged on the consideration of a plan for giving to the professors in the institutions from which graduates proceed an organisation and a larger influence in the counsels of the University. The general approval both of the Senate and of the Convocation has been given to this principle, and both bodies are, as the Senate believe, in substantial accord on the point, though the matter has not yet sufficiently ripened to admit of the presentation to Her Majesty of a joint petition for a Charter to give effect to the plan.

The scheme, which has been generally approved by the Senate, but is still subject to further consideration, proposes to unite into a class, under the name of Associated Colleges, educational bodies, not only in the metropolis, but throughout the country, which from the age of the students, the character of instruction given, and the fact that the Colleges have sent students as candidates for degrees in the University, may be worthy of association with it. It also proposes that the professors of these Associated Colleges, or representatives of the professors, should be gathered together into four groups or Faculties, according as they are concerned with arts, with laws, with science, or with medicine; and each Faculty is to select a smaller body to constitute a Board of Studies, which should aid the Senate and their committees in reference to the subjects of its Faculty. The examiners of the University, or some of them, are to be *ex-officio* members of the Boards of Studies.

The motives of these suggested changes are not far to seek. It was hoped that by giving to the teachers in the Associated Colleges a direct influence on the course of the examinations and a part in the government of the University two advantages would accrue. It would, to use a modern phrase, bring the Senate into touch with the actual teachers, and thereby remove any sense of dissatisfaction which may have been felt on their part, and any difficulty which may now exist in keeping pace with the varying requirements of the higher education; and, secondly, it would, it was hoped, awaken in the teachers of the several Colleges a sentiment of interest in the University which is now too often wanting, and which if created would strengthen its hands.

Furthermore, the Senate believe that such a union of the professors would be very beneficial to the Colleges which they represented, and that the closer connexion between the University and the Colleges would conduce to the benefit of the latter as well as of the former.

The Senate trust that before any radical change is effected in the organisation of the higher education in London the effect of such a scheme as has been sketched in outline will be fully considered by Her Majesty's advisers. The Senate believe that the result of such a scheme would be to unite together in organic relation the teachers of many of the principal Colleges throughout England and Wales, and that the London teachers, by their numbers, their eminence, and their nearness to the seat of the University, would exercise a great influence in its Faculties and Boards of Studies. In this way the Senate believe that the University would still further realise Her Gracious Majesty's opinion, recently expressed, that "it is a body which is eminently qualified to promote the advance of learning throughout her realm." The prospect presented by the alternative scheme now put forward by the Colleges is, the Senate believe, far less hopeful for the interest of education. A number, probably an ever-increasing number, of small universities removed from the beneficial and controlling influence of a great institution like this University, would come to compete for students and graduates with more regard to their number than to the character of their studies, and, if ever the present zeal for education should flag, would probably relapse into that condition of inefficiency into which even the great Universities of this country have at times fallen.

If the scheme for a modification of this University, to which reference has already been made, be carried into effect, the examinations of this University will be conducted as at present by entirely independent examiners, but the teachers will have a means of regularly communicating to the Senate their complaints, their wishes, and their views. If the petition of the Colleges be granted, a University will be constituted in which the whole power of conferring degrees will be in the hands of the teachers themselves.

The desire of many members of the Royal College of Physicians of London and of the Royal College of Surgeons of England to obtain for these bodies or for a body under their control the power of granting medical degrees has been a matter of notoriety for some time past. Though serious objections may be urged to such plan, it would be premature for the Senate to offer any observations upon a scheme which has not yet been put forward; and they only refer to it now as one of the elements of which account must be taken before the present demand of University and King's Colleges can be properly considered.

For this and many other reasons the Senate believe that the petition of University and King's Colleges cannot rightly be regarded as an isolated subject; but should be viewed in connexion, on the one hand, with the past history and future prospects of this University, and on the other hand, with reference to the very complicated conditions of the higher education in London. The Senate are at one with the petitioners in holding that the various teaching bodies in London would greatly gain by union and co-ordination; but they believe that this would be far more satisfactorily obtained under the supervision of such a body as this University than by the establishment of smaller and less responsible graduating bodies. If Her Majesty should think right to inquire into the working of this University, and into the condition generally of the higher education in London, the Senate of this University will do all in their power to assist in the solution of the complicated questions which would undoubtedly arise, and to make fruitful the results of the investigation.

The Senate has no desire to offer to the petition of the Colleges any selfish or captious opposition; but in the belief that issues of far-reaching importance are involved in the prayer of that petition, they desire the opportunity of showing cause before their Lordships why the prayer should not be granted

I am, Sir, your obedient servant,
ARTHUR MILMAN, Registrar.

THE ASSOCIATION OF GENERAL PRACTITIONERS AND THE PROPOSED DEGREE FOR LONDON STUDENTS.

THE following petition has been forwarded to the Privy Council by the Association of General Practitioners:—

To Charles Lennox Peel, Esq., C.B., Clerk to the Privy Council.

SIR,—We have the honour to ask you to lay before the Lord President and the members of the Privy Council an earnest protest on behalf of the Association of General Practitioners against some of the provisions of the Draft Charter for which the Councils of the Royal College of Physicians and the Royal College of Surgeons of England have petitioned. With the general object of obtaining for the students of the English medical schools and hospitals who pass their examination before the licensing bodies of London facilities for obtaining a degree which shall carry with it the title of "Doctor," the Association of General Practitioners is in entire accord. There is unquestionably a great hardship at present upon the licentiates of the London medical examining bodies, who, although possessing a curriculum equivalent to that of many of the British universities which confer medical degrees, have nevertheless no other facilities for acquiring such a degree than those afforded by the Universities of London. The standard of the University of London is expressly placed so high as to make it unattainable for more than a small minority of the London students. It is a degree of *élite*, and placed at so high a standard as to be altogether beyond the ordinary possibilities of the average student, even when thoroughly educated and carefully examined for all the necessities of general practice. In this respect, therefore, the English students are under a great disadvantage as compared with those especially of Ireland and Scotland, and this disadvantage is practically felt because, on the one hand, large numbers of students are thus attracted to the universities of Scotland and Ireland, where they obtain on reasonable conditions the title of M.D.; and, on the other hand, because Irish and Scotch students, who have received their degrees after an examination in no way more difficult than the average examination at present carried on in London by the examining bodies, settle in England, and practise alongside the London licentiates, with the added prestige of the degree and title of M.D., and thus claim a superior social and university status.

While, therefore, heartily concurring in and supporting the petition of the Colleges in principle for facilities for the licentiates of the London examining bodies to obtain the title of "Doctor of Medicine" under reasonable conditions, the Association of Practitioners earnestly protests against the attempt which is manifest in the petition of the two Royal Colleges to secure for themselves alone, and for their licentiates alone, a monopoly for such degrees which would operate most unjustly and injuriously to the interests of the public and of the profession in respect to the total exclusion from the further examinations which the Royal Colleges ask to be allowed to institute for the title of M.D. of all those members of the profession who for excellent reasons prefer the licence of the Society of Apothecaries. It must be remembered that the Society of Apothecaries, under the recent Medical Act, applied to the Royal Colleges of Physicians and Surgeons to be included in the combination which these two Colleges have formed for giving licences in Surgery, Medicine, and Obstetrics. A constituency of the Royal College of Surgeons assembled in annual meeting earnestly called upon the College to take that application into consideration, and it is a matter of universal knowledge that the whole voice of the profession was in favour of such a course. It should be remembered also that at an earlier date the two Colleges had, in conference with the Apothecaries' Society, settled a scheme for a conjoint board of examination, by which such combination of these three bodies, and of other examining bodies in England, would have been effected; and after such negotiations had been carried to that point, the Apothecaries' Society, at the instance and with the approval of the two Royal Colleges, applied to Parliament for a special Act, which was accordingly passed, to enable them to take part in such combination. Nevertheless, the Councils of the two said Colleges, who are two small and irresponsible bodies wholly composed of the class of consulting physicians and surgeons, resolved to exclude the Apothecaries' Society from any such combination. The General Medical Council of Education and Registration, after considering the subject, passed resolutions and made representations to the said two Colleges to induce them to alter this most unjust decision, as being contrary to the interests alike of the public and of the profession; but the two Councils once more abruptly declined.

Under these circumstances the Apothecaries' Society completely remodelled their examinations, the General Medical Council appointed its own examiners to supervise and complete the examinations of the Society in all departments, and such examinations are now carried on under the direct supervision and with the assistance of examiners directly appointed by the General Medical Council, in such manner as to afford a complete examination in all the departments of Medicine, Surgery, and Obstetrics.

The Royal Colleges are now asking the Privy Council to do by a side wind that which it directly refused to do in the framing of the Medical

Act, and that which the General Medical Council, following the voice of the great mass of the profession, also refused to do—namely, to treat the Apothecaries' Society with such injustice as effectually to exclude their licentiates from their just rights and privileges, and, in fact, to destroy the efficiency of the Society as an examining body.

The medical students who present themselves at the close of their career for examination at the Society of Apothecaries, and who become its licentiates, undergo a like preliminary examination with the licentiates of the two Royal Colleges, and such preliminary examination must have the like approval of the same authority—the General Medical Council—in order that they may all be entered on the "Register of Medical Students," which is kept by the General Medical Council. The conditions as to age and preliminary education are the same; the curriculum of education is the same; they are educated during the same number of years, in the same schools, the same hospitals, and by the same lecturers as those who take up the licence of the Royal College of Physicians and the Royal College of Surgeons. The examinations are conducted by Fellows and Members of the said Colleges, and with the aid of the Fellows and Members of the Society of Apothecaries, and of examiners specially appointed by the General Medical Council. They must, therefore, all alike fulfil the now fully adequate State requirements of a uniform minimum qualification.

The Association of General Practitioners ask, therefore, that the serious, inequitable, and unjust action shall not be perpetrated of excluding these gentlemen, similarly educated, similarly examined, and equally qualified, from any further examination for the degree and title of "M.D." in London, such as that for which the petition is now before the Privy Council. They earnestly and respectfully pray that in any Charter which may be granted for that purpose clauses shall be inserted that shall give to the licentiates of the Society of Apothecaries in Medicine and Surgery the same right to present themselves for examination, and if found duly qualified, to receive the title and degree of M.D. as the Royal Colleges ask for their licentiates. It should be noted that in neither case is any further educational curriculum to be imposed, and the only application of the two Colleges is for permission to create a further examination for the new degree. It is submitted that to exclude the licentiates of the Society of Apothecaries, who have passed through the same curriculum with the same teachers for the same time and at the same place as those whom the Royal Colleges propose to examine, would be a totally indefensible attempt to create a special monopoly for these two Colleges for their own benefit alone, and one altogether contrary to public right, public justice, and public interests. The Association of General Practitioners it is proposed to establish, and which it is proposed to call a Senate, is one altogether contrary to the general principles of constitution of such bodies which ought not to be permitted. Under the Draft Charter which is now submitted to the Privy Council it is proposed that the governing body shall be composed of the Councils of the College of Physicians and the College of Surgeons. Now, the Council of the College of Physicians is composed of an entirely self-elected and irresponsible body of members, wholly composed of the class known as consulting physicians, and in this body even the provincial consulting physicians are very slightly represented. The Council of the College of Surgeons is also a body representative only of a very small minority of the great body of licentiates of the College, the members, numbering 15,000, being wholly excluded. In the new governing which it is proposed to set up, these two inadequately constituted and unrepresentative Councils propose to assume to themselves the whole management of the University.

The general practitioners of England are at present totally debarred from representation on the Council of the College of Physicians, and practically debarred from representation on the Council of the Royal College of Surgeons, and it would be most unjust and altogether contrary to precedent that they should, as is now proposed, be also debarred from any representation on the new Senate, which is avowedly created for the express and sole purpose of granting adequate degrees to general practitioners. For the class of consulting physicians and surgeons, of whom the existing Councils are made up, and of whom the new Senate, according to the Draft Charter, would be made up, are fully provided with adequate facilities for graduating at the Universities of London, Oxford, and Cambridge, and the new Charter and new Senate are avowedly asked for with the sole purpose of creating facilities for graduation in medicine for general practitioners. Nevertheless it is proposed that the whole vicious constitution shall be maintained, and that general practitioners, for whom alone this new Senate or University is to be created, shall be wholly debarred from any share in its government or representation on its Council. The new graduates, however capable, however eminent, will in no way be represented. Once given their degrees, they cease to have any voice or vote in the management of the University of which they are graduates. Even if the Councils out of which it is proposed to elect the Senate were more satisfactorily constituted, it would be totally inadequate and unsatisfactory in constitution, but it is especially so considering the extremely unsatisfactory character and constitution of those bodies.

In this respect, also, your petitioners pray that the Privy Council will not allow a constitution of the governing body which is unknown to any other University throughout the kingdom, and which is totally out of accordance with any of the principles on which such governing bodies when created are now constituted. The Council will be prepared to support these arguments and this prayer by deputation, if the Privy Council think fit to receive such deputation, or by any other method indicated. They earnestly pray that the Lords of the Privy Council will not accede to an application containing so many elements of injustice and so contrary to public policy, public interest, and the general feeling of the whole body of the profession, without taking steps to carefully ascertain what is the opinion of the profession on the subject, and without giving effect to the general principles of public right.

It should be mentioned that the two said Councils, of which the constitution has been above referred to, have not in any way submitted this Charter to the large body of their members and licentiates, but have discussed the same in secret councils, and have forwarded it to the Privy Council without submitting it to the professional opinion which they have reason to know would wholly condemn the clauses to which reference is made above.

We have the honour to be, &c.,

C. G. WHEELHOUSE, President.
H. WALTER VERDON, } Hon. Secs.
W. GIBSON BOTT, }

410, Brixton-road, S.W. Association of General Practitioners.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5737 births and 3978 deaths were registered during the week ending December 3rd. The annual rate of mortality in these towns, which had been 20·0, 21·1, and 23·5 per 1000 in the preceding three weeks, declined again last week to 22·5. During the first nine weeks of the current quarter the death-rate in these towns averaged 20·6 per 1000, and was 0·7 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 15·5 in Brighton, 16·2 in Hull, 16·3 in Norwich, and 17·3 in Sunderland. The rates in the other towns ranged upwards to 29·6 in Oldham, 30·4 in Blackburn, 31·1 in Bolton, and 35·6 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 404 and 480 in the preceding two weeks, declined again last week to 443; they included 108 from scarlet fever, 96 from whooping-cough, 69 from measles, 59 from "fever" (principally enteric), 48 from diphtheria, 37 from diarrhœa, and 26 from small-pox. No deaths from any of these zymotic diseases were registered last week in Cardiff, whereas they caused the highest death-rates in Derby, Salford, and Sheffield. The greatest mortality from scarlet fever occurred in Sheffield, Norwich, Bristol, Bradford, Birkenhead, and Salford; from measles in Birmingham, Oldham, Bradford, Nottingham, Blackburn, and Derby; from whooping-cough in Newcastle-upon-Tyne; and from "fever" in Preston. The 48 deaths from diphtheria in the twenty-eight towns included 28 in London, 4 in Birmingham, 3 in Sheffield, and 2 in Portsmouth, in Huddersfield, and in Newcastle-upon-Tyne. Small-pox caused 25 deaths in Sheffield and 1 in Bristol, but not one in London or in any of the twenty-five other large provincial towns. The metropolitan hospitals receiving cases of small-pox contained 12 patients on Saturday last, against 16 and 13 on the preceding two Saturdays. The number of cases of scarlet fever in the Metropolitan Asylums Board hospitals and in the London Fever Hospital at the end of the week was 2726, against 2764 on the previous Saturday; the cases admitted showed a decline from the number in the previous week. The deaths referred to diseases of the respiratory organs in London, which had been 438, 461, and 560 in the preceding three weeks, declined again last week to 455, and was 27 below the corrected average. The causes of 89, or 2·2 per cent., of the 3978 deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Nottingham, Bolton, and in three other smaller towns. The largest proportions of uncertified deaths were recorded in Huddersfield, Halifax, Salford, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·9, 22·0, and 23·5 per 1000 in the preceding three weeks, further rose to 25·0 in the week ending Dec. 3rd; this rate exceeded by 2·5 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 17·1 in Greenock and 21·9 in Edinburgh, to 30·8 and 37.6 in Perth and Paisley. The 624 deaths in the eight towns last week showed a further increase of 44 upon the numbers returned in recent weeks, and included 28 which were referred to whooping-cough, 13 to scarlet fever, 12 to measles, 10 to diarrhœa, 9 to "fever" (typhus, enteric, or simple), 5 to diphtheria, and not one to small-pox; in all, 77 deaths resulted from these principal zymotic diseases, against 74 and 78 in the preceding two weeks. These 77 deaths were equal to an annual rate of 3·1 per 1000, which exceeded by 0·6 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 26 and 30 in the preceding two weeks, were last week 28, of which 14 occurred in Glasgow and 3 in Dundee. The 12 deaths from measles were within one of the number in the previous week, and included 7 in Dundee and 3 in Edinburgh. The fatal cases of scarlet fever, which had been 16 and 11 in the previous two weeks, rose again last week to 13, of which 8 occurred in Glasgow and 3 in Dundee. The 10 deaths attributed to diarrhœa somewhat exceeded the low numbers in recent weeks. The 9 deaths

from "fever," on the other hand, showed a decline, and included 4 in Paisley, 2 in Glasgow, and 2 in Edinburgh. Four of the 5 deaths from diphtheria were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 107, 144, and 156 in the preceding three weeks, further rose last week to 165, and were 23 above the number returned in the corresponding week of last year. The causes of 81, or nearly 13 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 34·6 and 33·8 per 1000 in the preceding three weeks, further rose to 35·0 in the week ending December 3rd. During the first nine weeks of the current quarter the death-rate in the city averaged 30·5 per 1000, the mean rate during the same period being but 19·8 in London and 19·5 in Edinburgh. The 237 deaths in Dublin last week showed an increase of 8 upon the number returned in the previous week; they included 13 which resulted from scarlet fever, 8 from measles, 4 from whooping-cough, 3 from "fever" (typhus, enteric, or simple), 2 from diarrhœa, 1 from diphtheria, and not one from small-pox. Thus the deaths resulting from these principal zymotic diseases, which had been 45, 29, and 33 in the preceding three weeks, were 31 last week; they were equal to an annual rate of 4·6 per 1000, the rate from the same diseases being 2·6 in London and 2·0 in Edinburgh. The fatal cases of scarlet fever, which had been 20, 8, and 11 in the previous three weeks, rose again last week to 13, while those of whooping-cough showed a decline. The deaths referred to measles, "fever," and diarrhœa corresponded with the numbers in the previous week. The deaths of infants corresponded with the number in the previous week, while those of elderly persons showed a further increase upon recent weekly numbers. Seven inquest cases and 5 deaths from violence were registered within the city; and 65, or more than a fourth, of the deaths occurred in public institutions. The causes of 36, or more than 15 per cent., of the deaths in the week were not certified.

FRENCH URBAN MORTALITY STATISTICS.

Since the beginning of the present year an official monthly return has been issued by the Bureau de l'Hygiène Publique in Paris, entitled "Statistique Sanitaire des Villes de France et d'Algérie." This return is a most valuable and welcome contribution to the various official returns dealing with the vital statistics of European cities, and gives, with considerable detail, the statistics of all French cities having a population of 30,000 persons and upwards. It is not without interest to note from this return that France contains fifty-one towns, with populations exceeding this limit, and that the aggregate population of these fifty-one towns slightly exceeds six and a quarter millions. In England and Wales at the last census enumeration in 1881, there were forty-seven towns with a population exceeding 50,000 persons, and containing an aggregate population of nine and a half millions. Therefore at the time of the last census considerably more than a third of the population of England and Wales resided in forty-seven towns having a population exceeding 50,000 persons; whereas in France only one-sixth of the population resides in thirty towns of the same minimum population. Even these figures only imperfectly indicate the marked excess of urban population in England and Wales; for while England has twenty-two towns having a population exceeding 100,000, France has only eleven towns exceeding this limit. In any comparison of the mortality statistics of the two countries, it is necessary to take full account of this wide difference between their proportions of urban population. The new French return, valuable as it is, and abundant as is the statistical material it contains, has one marked defect: no totals are given for the aggregate of the towns, and, moreover, only the bare facts are given, without any calculated proportions to population, which are necessary to make the figures intelligible and useful for comparative purposes. Having incurred the labour of casting the facts for the aggregate of the fifty-one French towns, it appears that the mean annual death-rate was equal to 26·1 per 1000 in August and to 21·4 in September, or to 23·8 in the two months. In the twenty-eight English towns (having a minimum population of nearly 80,000, instead of 30,000 as in the French towns) the annual rate during the months of August and September last did not exceed 20·0 per 1000. Thus in the smaller French towns the mortality during these two months showed an excess of 19 per cent. upon that which prevailed in the English towns. It is noteworthy that of the four largest French cities—Paris, Lyons, Marseilles, and Bordeaux—Marseilles is the only one showing a rate (29·1) exceeding the mean rate in the fifty-one towns, while the mean rate in these four largest cities did not exceed 21·7, against 23·8, the mean rate in the fifty-one towns. It is evident, therefore, that the largest excess of mortality in the French towns during August and September last occurred in the smaller towns.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon Samuel Arthur Crick, M.B., has been placed upon temporary half-pay on account of ill-health (dated Nov. 27th, 1887).

VOLUNTEER MEDICAL ASSOCIATION.—Ambulance Department: The appointment of Acting Surgeon Walter Pearce, M.D., as Instructor to the Ambulance Department of the Volunteer Medical Association, has been cancelled.

Correspondence.

"Audi alteram partem."

SUPRA-PUBIC LITHOTOMY.

To the Editors of THE LANCET.

SIRS,—I am compelled to trouble you with a note relating to the history of supra-pubic lithotomy given by Dr. Dulles in your issue of last week. The reference which Dr. Dulles does me the honour to make is, however, not accurate, and I am sure he has no desire that it should remain so. It is in these words: "And lastly, the conversion of Sir Henry Thompson, who, after long denying its claims, has become one of its most enthusiastic propagandists."

There are two forms of the operation: the old one before Petersen made his modification, and that which has been employed since. I have never denied the claims of either. The old operation I had occasion to perform twice only—once in University College Hospital, and once in private. I always regarded it as a rare and occasional resource for very large calculi, seldom necessary, but certainly had no prejudice against it whatever. The new operation I advocated on the ground of reports respecting it which I had confidence in, even before I had tried it, at my lectures at the Royal College of Surgeons in June, 1884. I stated that Petersen's modification had given "a new and improved position to the high operation," adding that "in the next case for which the knife is required I shall perform the operation on his method." A week after such a case occurred, and I did so, and so introduced the proceeding into this country. I have followed it by twenty-four other cases since, selecting the most formidable cases for the purpose, and am as satisfied with it now as I was at the outset.—I am, Sirs, yours truly,

Wimpole-street, W., Dec. 6, 1887. HENRY THOMPSON.

THE COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

To the Editors of THE LANCET.

SIRS,—Now that the question of compulsory notification of infectious diseases is prominent, it appears opportune to call attention to a Society which is quietly at work in the parishes of St. Margaret and St. John, Westminster. About five years ago Mrs. Johnson, at a meeting held at the house of Archdeacon Farrar, called attention to a Society she had started in Hastings for the notification and prompt discovery of infectious disease, and for dealing with the infected area on scientific principles. She advocated the extension of the system to the metropolis, and forthwith the Westminster Sanitary Aid Association was started in the joint parishes of St. Margaret and St. John. Now, I desire to call the attention of the medical profession

at large to the objects of this Association, and, further to observe that while in nearly every other part of London a serious epidemic of scarlet fever has been raging, in these two parishes, which contain a population of 60,000, the number of cases notified to the Society have barely exceeded the average of the last four years; and, as far as the above parishes are concerned, there has been really no epidemic of scarlet fever or other infectious disease.

In the last six months of 1886 thirty-three cases of infectious disease came under the notice of the Society's officers, and in the five months from June 29th up to date the number has been thirty-nine. Now, in the absence of all compulsory notification, these figures may appear to have little value; but really the success of the Society has been so great, and has so enlisted the sympathy and co-operation of the medical men resident in the district, that practically the notification of all infectious diseases is immediately communicated to the Society.

We have also the cordial co-operation of the medical officer of health and his sanitary officers, who inform us of every case that comes under their official cognisance; and in return we take immediate steps for disinfecting the infected house, removing in the meantime, if necessary, the healthy occupants to our sanitary house at 1, Edward-street, Vincent-square, while the process of disinfection is being carried out. This is done effectively by our nurse and indefatigable lady manager, Miss Stevenson, who seal up the infected house or dwelling room for at least twelve hours and burn sulphur cakes. All the bedding and clothing, of course, is opened and exposed to the fumes. As a matter of fact, in almost every case Miss Stevenson, by judicious reasoning and persuasion, induces the parents or friends to consent to the removal of the sufferer to the fever hospital, and I am happy to say that, mainly owing to the good work of this Society, the opposition to the Bill for the Compulsory Notification of Infectious Disease has practically died out amongst the tradesmen and shopkeepers in this district, so much so that last week the Sanitary Committee of the Westminster District Board of Works, on the invitation of the Medical Officers of Health Association and the vestry of Kensington, decided to petition the Government to bring in this Bill. It appears certain that in the next Parliamentary session this question will be effectually dealt with, and I cannot but feel proud that in this district we have, so to speak, inserted the thin edge of the wedge, and taken the first step in practically testing the machinery which must be set in motion when this Bill becomes law.

I am, Sirs, your obedient servant,

THOS. BOND, F.R.C.S.,
Member of the Sanitary Committee of the Westminster Board of Works.

The Sanctuary, Westminster, Nov. 23th, 1887.

*** The objects of the Westminster Sanitary Aid Association are to provide female sanitary visitors to teach the practice of disinfection, to promote the removal of infectious cases to hospital, to assist, when local circumstances permit, in the isolation of the sick in their own homes, and, further, to watch over houses in which infectious disease has recently appeared. The Association also aids in the nursing of the sick, in the prevention of attendance at school of children likely to convey infection, in procuring the sanitary improvement of houses in which are found conditions prejudicial to health, and, finally, in enlisting the co-operation of all existing sanitary agencies in the prevention of infectious disease.—ED. L.

SIR JAMES PAGET'S "MORTON LECTURE" ON CANCER AND CANCEROUS DISEASE.

To the Editors of THE LANCET.

SIRS,—In the discussion on Cancer at the Pathological Society in 1873 Sir James Paget stated that since his practice had become exclusively, or almost exclusively private, one in every three was the proportion of instances in which it was possible to discover a history of cancer in the family of his cancerous patients.

The report of the Collective Investigation Committee on Cancer of the Breast shows that 210 returns contained definite statements as to the heredity of cancer. Of these 116 were to the effect that there was no family history of cancer, while in 68 cancer had occurred in other members of the patient's family; the proportion is therefore more than one in three.[1]

From a large number of cases of cancer which I have collected in hospital and private practice, I find the proportion of cases with a family history of cancer is slightly below one in four cases, and in several cases several members in the same family were affected with the disease. Of two of the most striking cases, one was that of a man aged sixty-one, who died of cancer of the tongue, in which the lymphatic glands in the neck were extensively involved. His father died of cancer of the penis, aged sixty-three; his uncle (father's brother) died of cancer of the tongue, aged sixty-three; his father's sister died of cancer of the breast, aged sixty-five; his mother also died of cancer of the uterus. The other case was that of a gentleman who died of a malignant nasal growth; one sister died of cancer of the breast, and another of cancer of the stomach; these three died within a period of fourteen weeks.

The further experience of Sir James Paget evidently has not shaken his belief in the constitutional origin of cancer, or that it is a blood disease and probably of micro-parasitic origin. I have always contended, and the results of my investigation, so far as they have gone, support my contention, that to satisfactorily account for the occurrence of cancer in any individual two factors must be present: the one, as Sir James Paget describes it, general or diffused in a morbid material in the blood; the other local, in some part with which the material produces disease.

No surgeon doubts that the development of malignant disease is nearly always due to local irritation of the part affected; but to prove that the local irritation is the actual cause of the malignant growth, I submit that the same irritation existing in another individual of similar age &c. should produce the same result in the majority, if not in all, cases. This we know is not the fact. What explanation can we give, then, to account for the disease developing in one case and not in the other? I contend there can be but one reasonable explanation, and that is: in the one case the soil is adapted to the growth of cancer—i.e., that there is some morbid condition of the blood which renders the individual liable to the disease; while in the other case there is no such condition of the blood.

The case reported by Mr. Jennings in your last week's issue, in my opinion, illustrates this in a peculiar manner, as it is most rare to find cancer existing symmetrically as he has depicted in any one individual; and while the same cause of irritation might have caused the disease on either side of his patient's face, yet I doubt if such would have occurred had there not been some marked condition of the blood existing.

One word with regard to the treatment of cancer with Chian turpentine. I have given this drug an extensive trial in numerous cases of cancer of the breast, tongue, and uterus. Notwithstanding the patients took this drug on exactly the same lines as laid down by Mr. Clay, I have not seen the slightest good effect in any case of cancer of either the breast or tongue. In some of the cases of cancer of the uterus the patients have expressed themselves as free from pain, and the offensive smell has been lessened; but in no case have I seen the disease cured or otherwise improved. I hope, however, to report on the cases treated by me at the Cancer Hospital by this drug more fully at a future date.

I am, Sirs, yours faithfully,

F. BOWREMAN JESSETT, F.R.C.S. Eng.

Upper Wimpole-street, W.

THE TREATMENT OF CANCER.

To the Editors of THE LANCET.

SIRS,—In your issue of the 3rd inst., Dr. Elder of Nottingham, referring to the treatment of cancer by Chian turpentine, says that "seven years ago Professor Clay gave to the profession the welcome intelligence that at last a specific cure for cancer had been found in Chian turpentine." He proceeds to assert that "no remedy has had a fairer trial at the hands of his *confrères*, or [has] more grievously disappointed them." As a mere matter of justice I am bound to

[1] Vide Report, Brit. Med. Jour., vol. i., p. 37. 1887.

traverse these assertions. I did not declare the discovery a "specific cure" for cancer. I stated in my first communication to THE LANCET that, as the result of experiments carefully made and continued for a considerable time, I had found Chian turpentine beneficial in certain cases of cancer—uterine cases were those especially referred to—in a degree far greater than in the case of any other means then adopted. I said that as the result of using the drug, under the conditions I then specified, the progress of the disease had been arrested, hæmorrhage had ceased, pain had been alleviated, and the growth had finally disappeared. I supported these statements by details of cases, and upon them I based the conclusion that an agent had been discovered by which this terrible malady might be held in check in a manner hitherto unhoped for. In a later paper, I stated my belief, founded upon longer experience, that it was possible to formulate in certain cases a plan for the treatment of cancer which would result in a cure. This conclusion I again supported by the citation and description of cases. Still later, in your journal of the 19th of November of this year, I gave details of other cases which supported my view; and I have also received independent testimony from medical men who have tried the remedy or have watched its trial, and have acknowledged similar results.

To speak of the proclamation of a "specific cure" when the claim put forth was tentative and experimental, and was from time to time supported by the publication of cases open to inquiry, is nothing but an abuse of terms; and, in the presence of the evidence of benefit referred to, it is equally an abuse of terms to speak of the "almost unanimous condemnation" of the use of Chian turpentine in cancer. I have hundreds of letters from medical men and their patients testifying to the great benefit experienced from the treatment. As to the fair trial of the alleged resulting grievous disappointment, I have to say that it is useless to attempt to do what many of those who condemn the treatment have done—namely, to apply it without reference to the conditions which, according to my experience, are necessary to success. I have invariably declared that to be of value the treatment must be adopted in an early stage of the disease, that it must be persistently continued, and that it must be enforced with due regard to all the circumstances of particular cases. It is obviously unjust to the treatment to have recourse to it in advanced stages when, as some medical men have admitted, "the end is near," and then to expect beneficial effects which are obtainable only in conditions affording reasonable hope of advantage. Such an assumed trial is not a fair one, and any condemnation based upon it is valueless. In the face of such statements I must be pardoned if I prefer to adhere to the evidence of my own experience; and here I affirm that, referring especially to uterine cases, only twice out of numerous examples have I seen a cloaca develop when the drug has been properly used, both as to method and time. That, as shown by the Middlesex Hospital Reports, such patients have died from other causes I do not contest, and it is obvious that fatal results occur when the use of the Chian turpentine is complicated and hindered by the use of opium and its derivatives. I cannot too often or too strongly repeat that to give it full and fair effect the remedy must be employed under the conditions which alone in my experience render it operative. If medical men will resort to the remedy at an early period, will persist in its use under apparent difficulties, will avoid opiates, and will give increasing doses, I am convinced that the reported failures will be replaced by records of numerous and most gratifying successes; but if success is to be obtained, the conditions essential to progress must be observed. With reference to your own observations on the subject, I have to thank you for their courteous and considerate tone, prompted by a manifest desire only to arrive at the truth. That is my own desire. I shrink from no test of the cases I have recorded, and from no method of inquiry based upon sound principles and controlled by adequate conditions. I should welcome such an inquiry, but it is obvious that the claims of a large private practice and detachment from hospital work prevent me from conducting investigations such as those by M. Pasteur with regard to hydrophobia. I can only continue my own investigations as cases occur in my practice. These, by their results, confirm my original conclusions in an increasing degree, and I shall, as they progress, be willing to communicate to the profession both the results and the details of the cases upon which they are established. If others will, under the same conditions, adopt the course I have recommended, I do not doubt that their conclusions will confirm my own.

I am, Sirs, yours faithfully,

Birmingham, Dec. 6th, 1887. JOHN CLAY.

To the Editors of THE LANCET.

SIRS,—Mr. Jennings, in your last number, commenting on Sir James Paget's "Morton Lecture," says: "Instances in which the disease [cancer] has been cured are familiar to most practitioners." As I read Sir James Paget's conclusion, it is that in his vast experience he has never yet met an instance of cure. During forty years, in an almost unlimited field for observation, it has never been my lot to see one. If Mr. Jennings or Mr. Clay will lay before the profession a solitary instance in which any cancer infiltrating the textures immediately around its origin, or contamination of the adjacent glands, has been cured by any mode of treatment—not excepting the use of the knife—a result will have been attained not hitherto acknowledged by pathologists. At present I am unable to regard the cases referred to and published by either of these gentlemen as being instances of cancer.

To Mr. Clay an appeal has been made both by Mr. Lawson Tait and myself, as the following extracts will prove:—

"Let him, Professor Clay, submit his cases to his colleagues or other competent observers, that the actual existence of cancer may be beyond dispute; let him cure a single case, and he will have no reason to complain of the congratulations he will receive from the profession in Birmingham or elsewhere."[1]

"I attended at the Queen's Hospital, at Professor Clay's request, and was shown by him three or four cases of undoubted cancer in the breast in various stages of progress, and all of which were being treated by Chian turpentine. I was to see them again in six weeks, and the time having expired I wrote to Professor Clay on the subject. I have his letter by me, dated Feb. 1884, in which he tells me the cases were otherwise ill, and not to be seen, save by possible postponement; and this is all I have been able to gather of Professor Clay's treatment by Chian turpentine of his own cases, submitted for inspection."[2]

Surely there is no time like the present for the "careful re-examination of all the evidence Mr. Clay can produce." These are your editorial words in considering his recent cases. Other correspondents ask for a "tribunal" of inquiry,[3] whose judgment the profession would recognise. It cannot, I venture to think, be a moment too soon to arrest the further administration of a nauseous drug in cases already pronounced hopeless, or to promote its administration by every means in our power.

I am, Sirs, yours faithfully,

Birmingham, Dec. 6th, 1887. OLIVER PEMBERTON.

To the Editors of THE LANCET.

SIRS,—I agree with Mr. George Elder's letter in your last issue, that the claims Mr. Clay makes for Chian turpentine ought not to pass unchallenged by those who differ from him. I have tried the treatment in six cases of uterine cancer and three of cancer of the tongue, and am giving it one more trial at the present time in cancer of the tongue and throat, but as yet I have not seen the slightest benefit derived from the treatment.—I am, Sirs, yours truly,

Torquay, Dec. 1887. W. T. BORRHAM, M.D.

THE DIPLOMA IN PUBLIC HEALTH OF THE APOTHECARIES' SOCIETY OF LONDON.

To the Editors of THE LANCET.

SIRS,—As being directly and mainly responsible for the wording of Section 21 of the Medical Act, 1886, which deals exclusively with the registration of diplomas in sanitary science, I would like to state that it was never intended that the Apothecaries' Society and Hall should be permitted to participate in having their diplomas in public health registered—i.e., if these bodies in the future desired to grant such,—and the wildest interpretation of the said section cannot be made to include these bodies; therefore I, for one,

[1] THE LANCET, Oct. 23rd, 1880. Letter from Mr. Tait.
[2] The writer's Ingleby Lecture on Cancer in the Female Breast, 1884.
[3] Mr. Elder's letter, THE LANCET, Dec. 3rd.

BEST COPY AVAILABLE

am pleased that the General Medical Council has referred the matter for the opinion of counsel at the instance of Dr. Heron Watson. On the notice paper of the House of Commons, May 17th, 1886, both Sir Henry Holland and Sir Lyon Playfair placed amendments to the Medical Act (1858) Amendment Bill. Sir Henry Holland's clause included "universities or medical corporations of the United Kingdom," which would have, if passed, included the Apothecaries' Society and excluded the Colleges of Surgeons, while the Government clause simply mentioned "any university in the United Kingdom," and excluded all the Colleges and Apothecaries' Societies. Sir Henry Holland's clause was dropped as an amendment, and on my writing to Sir Lyon Playfair to include the various Colleges in the matter of registration, I was informed, in a letter dated May 26th, 1887, that Sir Lyon Playfair had done so; and also by reference to Section 21 my other suggestions were carried out. The section reads—"a diploma, granted by any College or Faculty of Physicians or Surgeons or University in the United Kingdom, or by any such bodies acting in combination, &c." Surely no one can interpret that either of the Apothecaries' Societies is included in this section, and is entitled to registration.

I am, Sirs, yours faithfully,

J. EDWIN COONEY, D.P.H.Camb.,
Late Hon. Sec. Public Health Medical Society.

Vereker-road, West Kensington, S.W., Nov. 26th, 1887.

TREATMENT OF ECZEMA AND PSORIASIS.

To the Editors of THE LANCET.

SIRS,—In Dr. Myrtle's interesting account of his successful treatment of eczema and psoriasis by means of the Harrogate sulphur waters, he relates the case of a surgeon who, when he was approximately well, after reading a paper of mine on Counter-irritation over the Vaso-motor Centres in Obstinately Recurrent Eczema, applied a mustard plaster to his nape, and the eczema was set going again. Now, it is a well-known fact that doctors seldom treat themselves judiciously, and in medicine, as in the affairs of this life generally, it is always best to "let sleeping dogs lie." Dr. Myrtle, however, takes occasion from this case to remark: "With all deference to Dr. Crocker, and whilst concurring in his views as to the influence the vaso-motors have in eczema, I cannot speak too strongly against the application of counter-irritants to the skin of the eczematous for any purpose whatever."

Lawyers have a well-known dictum, that "single cases make bad law," and the same statement holds good for physic. If I were to relate the case of a patient whose eczema had been aggravated by the injudicious use of the Harrogate waters (not a difficult thing to do), and upon that said, "With all deference to Dr. Myrtle, the Harrogate waters should not be used in eczema on any pretext whatever," he would, I think, not only perceive that "all deference" was curiously shown in a flat contradiction of his statements, but also point out that numerous and striking successes showed the utter fallacy of such sweeping statements. The fact is, that every remedy which is worth anything is potent for evil as well as good, and that when a new treatment is being tried the views of the originator as to the selection of the case and the mode of carrying out the treatment should be strictly observed, at all events until the practitioner has some experience of the weapon he is wielding; disappointment is otherwise pretty sure to be the result, and perhaps a valuable aid discredited. Further experience in the employment of counter-irritation over the vaso-motor centre of the affected region in obstinately recurrent eczema has only confirmed and extended my first statements. It should be used when the fresh attack is impending, of which the patient generally has a few hours' notice by his sensations. The attack may thus often be either warded off or greatly mitigated, as many of my cases prove, and other observers can corroborate by independent testimony. The treatment, however, should never be applied when the activity of the eruption is abating, as the last case in my original paper demonstrated. Great relief may also often be obtained where severe paroxysms of itching render the patient's life a misery, as in the following case:—A tall, strong man, aged thirty-eight, came to the hospital with eczema of the scrotum and inside of the thighs of three months' duration. The irritation became so great that even when showing his disease he could not refrain in the presence of all the students from scratching most frantically. A mustard leaf was ordered over the lower dorsal and upper lumbar spines, but he put it on too low down, and only experienced slight relief; another was ordered higher up, and the next note was, "Irritation is much less to-day." A week later a fresh attack with "frightful itching" was coming on, and the mustard was reapplied. It gave him immediate relief for twelve hours, and then there was a slight return of itching for a few hours; after this the eruption and irritation got better, and had continued to do so until his next visit. The treatment had to be repeated twice more before the tendency to recurrence was quite subdued, but after that he got so well that he ceased to attend three weeks from the commencement of the mustard treatment. In another case a man aged fifty-one had acute eczema of the face, arms, and forearms, which were streaming with serous exudation, attended with much itching and burning. He improved at first with topical applications and saline aperients, and then a fresh attack ensued. A mustard leaf was applied over the nape; he felt great relief to the head; the irritation was better next day. The discharge from the face three days later being very great, mustard was reapplied. This stopped the exudation from the face at once, but not from the arms, which ceased gradually; and from that time the case gave no further trouble and required no more mustard, though he was not quite well for some time later.

Such cases as these, which could be corroborated by many others, are not to be pooh-poohed because they do not accord with preconceived ideas. Moreover, it appears that Dr. O'Leary of St. Vincent's Hospital and Dr. Brooke of Manchester have independently used similar treatment with success, but it is not pretended for a moment that every case of eczema will be suitable for this method.

I am, Sirs, yours obediently,

December, 1887. H. RADCLIFFE CROCKER.

THE TREATMENT OF INTESTINAL OBSTRUCTION DUE TO IMPACTED GALL-STONE.

To the Editors of THE LANCET.

SIRS,—I congratulate my friend Mr. Thomas Smith on the success of his case; but I wish to make public an easier way of dealing with such a case than that of opening the intestine. I have used it in one case successfully. It consists in passing a fine needle through the wall of the intestine from below (that is, from the empty part of the intestine) into the gall-stone. The stone is thus easily and immediately split up into fragments and passes readily along the intestine, and the grave complication of opening the intestine is rendered unnecessary. The operation is, in fact, little more than an exploratory incision.

I am, Sirs, yours truly,

The Crescent, Birmingham, Dec. 2nd, 1887. LAWSON TAIT.

LIVERPOOL.

(From our own Correspondent.)

POPULAR LECTURES BY PROFESSORS AND LECTURERS OF UNIVERSITY COLLEGE, LIVERPOOL.

DURING the last three months a course of eight lectures on the Structure and Functions of the Human Body in Health and Disease has been given by some of the professors of the Liverpool University College. It was commenced by Professor Herdman, whose subject was the "General Structure of the Animal Body." Professor Banks followed with the "Nutritive System and Digestion"; and Professor Caton with the "Circulation and Purification of the Blood." Mr. Harvey Gibson discoursed upon the "Nature and Uses of Food," Mr. Paul on "Work and Recreation," Dr. Barron on the "Seeds of Disease," Professor Shaw on the "Structures we Inhabit," Dr Hope on "Common Sanitary Defects and the Diseases associated with them." An attentive audience, varying from 900 to 1000, were present at each lecture.

DEATH FROM HYDROPHOBIA.

Another death has occurred from hydrophobia, the victim being a cabdriver, aged forty-two years, who lived in a

street in the centre of the city. Three months ago he was followed home by a white fox-terrier; he put it in the cellar for the night, and next morning was feeding it, when it snapped at his right hand and slightly scratched the forefinger. He sucked the scratch, and after putting some wax upon it, took no further notice, following his usual occupation up till the 28th ult., when he complained of being unwell, and stayed at home the two following days. He was removed to the Royal Infirmary, where he died the same day with all the usual symptoms of hydrophobia. A post-mortem examination was made by Dr. Barron, pathologist to the infirmary, who found congestion of the base of the left lung. He removed the spinal cord for microscopical examination.

CITY MEAT SUPPLY, AND THE METHOD OF SUPERVISION THEREOF.

Dr. Hope, the assistant medical officer of health, read a paper at the last meeting of the Medical Institution on a very important subject: "Our Meat Supply, and the means adopted to ensure its wholesome quantity." Some idea of the vast quantity of the work done may be gathered from the following figures, which were circulated among the members. The total quantity of live cattle, sheep, and pigs imported into Liverpool from Canada, United States, Spain and Portugal, and Ireland during the year 1886 was:—

—	From Canada.	United States.	Spain and Portugal.	Ireland.	Total.
Cattle	21,837	47,754	642	268,284	338,517
Calves	7	1	—	4,634	4,642
Sheep and lambs	43,641	2,891	—	410,342	456,874
Swine	70	—	—	128,525	128,595

The following are the quantities (cwt.) of dead meat—viz., mutton and beef—imported into Liverpool from the Argentine Republic, United States, and Canada, during the year 1886:—

—	Argentine Republic.	United States.	Canada.	Total.
Beef (fresh)	1,044	615,088	10,014	626,146
Mutton ,, ...	45,036	5,375	52	50,463

(Excluding bacon, hams, tinned meat, &c.)

The number of animals slaughtered within the city during 1886 at the Abbatoir Company's premises, at the fourteen private slaughter-houses in new parts, and at the seventeen private slaughter-houses in old parts of the city, were:—

—	Cattle.	Sheep.	Lambs.	Calves.	Pigs.
Abattoir	34,586	207,163*	—	16,098	16,320
Slaughter-houses in new parts	4,165	14,685	4,446	365	11,735
Slaughter-houses in old parts	6,353	18,122	5,078	12,080	34,305

* Including lambs.

THE LATE EDWARD PARKER, F.R.C.S. EDIN.

The somewhat sudden death of this gentleman after a short illness was received with much regret by a large circle of professional and other friends. The deceased, who was in his sixty-ninth year, received his medical education in Edinburgh nearly fifty years ago, and, coming to Liverpool, was one of the first surgeons of the then newly established Northern Hospital. He commenced practice later on in Kirkdale, which was then a pleasant suburb northwards of Liverpool, but for many years past built upon and absorbed into the city. In 1845 he obtained the appointment of surgeon to the industrial schools of the parish of Liverpool, situated at Kirkdale, which appointment he held up to the time of his death. He was also for twenty-four years surgeon to the Northern Division of the Liverpool Police, and from 1869 till recently he was surgeon to the borough gaol at Walton-on-the-Hill. He had also at one time a considerable private practice, and, being punctual, exact, and very painstaking, he was enabled to perform all the various duties involved in these public and private engagements with credit to himself and satisfaction to his patients. Some weeks ago he took a chill, which was followed by a severe attack of pneumonia, which, acting upon a somewhat weak heart, compelled him to take to his bed. He was attended by Dr. William Carter, and a few days before his death was able to sit up, and appeared to be approaching convalescence. On the morning of the 1st inst. he was seized with severe abdominal pain, and expressed an opinion to his son that he was dying from perforation of the bowel. This subsequently proved to be correct, an opening being found in the duodenum just beyond the pyloric end of the stomach. His funeral, which at his expressed wish was of the very simplest character, was numerously attended by medical friends and representatives from the Industrial Schools and Liverpool police. Mr. Parker was twice married; he leaves a widow, five sons, and a daughter. Two of the sons are surgeons, one being Mr. Rushton Parker, the well-known Professor of Surgery in Liverpool University College; the other, Mr. Wm. R. Parker, is in practice at Kendal.

WORKMEN'S GRATITUDE TO THE EYE AND EAR HOSPITALS.

The local branch of the Boiler-makers and Iron Shipbuilders' Society have set an example well worthy of imitation elsewhere. They have celebrated the Queen's Jubilee in a manner which, to use the words of a local daily paper, does credit to their thoughtfulness and sense of gratitude. The scheme took the form of a Jubilee voluntary gift from the members of the Society to the Birkenhead Eye and Ear Hospital and the Liverpool Eye and Ear Infirmary. These men are, as is well known, more peculiarly liable to accidents, especially to their eyes and ears. A sum of £21 was subscribed, of which £15 15s. were given to the Liverpool institution and £5 5s. to that of Birkenhead. In addition to this, the former institution was presented with a splendid electric battery, supplied by an eminent London firm at a cost of £10 10s. Such an illustration of the gratitude of working men is most refreshing.

FLOGGING GARROTTERS.

Mr. Justice Day, who presided at the recent assizes as well as the two preceding, is a firm believer in the deterrent power of the "cat," and is averse to long terms of imprisonment, especially for the younger prisoners. Following this view, which so far as this locality is concerned would appear to be well founded, a number of prisoners who had been sentenced to corporal punishment, in addition to short terms of imprisonment, were recently flogged in H.M. prison, Walton-on-the-Hill. The skin is rarely broken, but there is always some cutaneous hæmorrhage where the strokes fall. In a series of eighty cases no ill effects have followed.

Liverpool, Dec. 6th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

FEVER IN NEWCASTLE.

THE febrile epidemic in Newcastle still continues, some practitioners having as many as ten or fifteen cases on their lists. Although the weather has been fine for the season, it has been changeable, high winds alternating with hoar frosts and frequently a damp atmosphere. The death-rate has been high the last few weeks, but I do not think it is so much owing to fever as to a high mortality in the aged and weak. There has been a rather serious outbreak of scarlet fever in the children's wards of the Newcastle Workhouse. Last week as many as 178 had been attacked. Fortunately the type is mild, and I have not heard of any deaths to-day. I hear that the epidemic is subsiding. The disease was, as usual, imported by an outside waif.

GATESHEAD CHILDREN'S HOSPITAL.

The foundation and Jubilee memorial stones of the Gateshead Children's Hospital were laid on Friday last in presence

of a large and influential assembly. The weather was fine, but a strong piercing wind blew over the site, and made matters were anything but pleasant for visitors to the ceremony. Up to the present sufficient has been received to make building provision for twelve beds and to leave a sum towards the endowment fund, which, it is to be hoped, will soon be augmented.

SPREAD OF SMALL-POX IN YORKSHIRE COLLIERIES.

Considerable alarm is being occasioned by the spread of small-pox in some of the Yorkshire colliery districts, where the small cottages are crowded with lodgers. On Saturday last fresh outbreaks were reported at Birdwell and Broomhill, near Wombell, where on Friday the authorities were compelled to board a cottage round to isolate it. At several large collieries workmen from infected families have been stopped. Serious interference with trade is anticipated.

Newcastle-on-Tyne, Dec. 6th.

EDINBURGH.

(From our own Correspondent.)

ROYAL COLLEGE OF PHYSICIANS.

At the annual general meeting of the Fellows which took place last week, the election of office-bearers in the College was the chief business of importance. Sir Douglas Maclagan, who has for two years occupied the presidential chair, retires at this time on the completion of his term of office, but retains a deliberative voice in the affairs of the College by his appointment as Vice-President. His place as President has been taken by Dr. R. Peel Ritchie, one of the senior Fellows, whose long experience in the Council and as treasurer to the College has given him an intimate knowledge of its affairs, and whose careful cultivation of its best interests in the past, renders him peculiarly well fitted to act yet more directly as their guardian and conservator during his two years' term of office as President. The other officers of the College are as follows:—Treasurer: Dr. P. A. Young. Secretary: Dr. G. A. Gibson. Librarian: Dr. G. W. Balfour. Curator of Museum: Dr. T. A. G. Balfour. Curator of Laboratory: Dr. J. Batty Tuke.

THE VACANT ASSESSORSHIP AT ST. ANDREWS.

Considerable interest is felt in Edinburgh in regard to the election, now pending, of an assessor of the General Council of the University of St. Andrews, who will represent that body in the deliberations of the University Court. Dr. John Duncan, M.A., LL.D., is one of the candidates for the vacant office, whose high position in the profession in Scotland, no less than the great services he has rendered in favouring the progress and developing the stability of the Edinburgh School, specially point him out as well fitted to hold an important post, in which his intimate knowledge of the Scottish University system and its requirements will make his services invaluable. His opponent, Viscount Cross, has already held office as assessor; and it is felt keenly by medical graduates of St. Andrews that the interests of medicine in that University require a more thorough representation than they could obtain during a layman's tenure of office.

THE VICTORIA DISPENSARY.

Under the above name a new charitable institution has been established in Edinburgh, which bids fair to take a useful place among the medical charities of the city. It is specially devoted to the treatment of consumption and diseases of the chest, for which cases solely it is intended. It will, therefore, in no way trench on the useful work already done among our poorer classes by the many sister institutions now flourishing around it, but rather relieve them from th e congestion of chest cases that tend to bulk too large in proportion to other branches of their remedial work. The want of such an institution has long been felt in the city on account of the great ravages committed by phthisis, particularly in that class of people who, coming from healthy country districts, fall only too easy and too early a prey to the evil influences of the narrowed physical surroundings of their city life. The new dispensary is situated in Bank-street, in the central district of the city, and is fortunate in possessing light and airy waiting and consulting rooms, which have been brightly and tastefully decorated for the reception of patients. The institution has been placed under the charge of Dr. R. W. Philip, whose recent researches on the Etiology of Phthisis, submitted in the form of a thesis for the Doctorate in Medicine to the University, received the University Gold Medal, the highest honour attainable by its graduates. Dr. Philip also received in recognition of his work the Triennial Gunning Prize in Medicine, a bursary recently founded for the encouragement of original research in connexion with the practice of medicine, and awarded to the most eligible competitive thesis presented within the specified period.

Edinburgh, Dec. 6th.

DUBLIN.

(From our own Correspondent.)

ILLNESS OF SIR CHARLES CAMERON.

THIS gentleman was taken seriously ill last week, and for some time his life was in imminent danger. It is gratifying, however, to be able to state that his condition has considerably improved, and it is confidently expected that in a short time he will be able to resume his ordinary duties. I may add that there is no member of the profession in Dublin better liked both by his brethren and the community at large than Sir Charles Cameron, and a termination to his career of usefulness would be regarded as a national calamity.

DEATHS OF BRIGADE-SURGEON GRAY, SURGEON-MAJOR PUREFOY, AND DR. WHISTLER.

During the past week three Fellows of the Royal College of Surgeons in Ireland have died—viz., Brigade-Surgeon Joseph Gray (retired), Surgeon-Major J. W. Purefoy, and Dr. Whistler of Bray. The last-named gentleman met with his death under distressing circumstances, being killed by an accident in the hunting field last Saturday. Surgeon-Major Purefoy had only three weeks since returned from Trinidad, and died after a short illness. He was buried at Lucan, where his father, the late Dr. T. Purefoy, practised for many years. The funeral *cortège* was preceded by a corps of the Liverpool Regiment, the band playing Chopin's Funeral March and the Dead March in Saul, and was followed by a detachment of the Army Medical Corps, headed by Surgeon-General Hassard, principal medical officer in Ireland, and officers of the Medical Staff serving in Dublin. On the same day the funeral of Dr. Whistler of Bray, who died at an advanced age, took place. The deceased was a graduate in Arts and Medicine of the University of Dublin, and obtained the Fellowship of the College of Surgeons forty-two years ago. He was a well-known figure at the annual meetings of the Fellows of the College of Surgeons, and took an active part in its proceedings.

SCIENCE AND ART MUSEUM, DUBLIN.

Dr. R. Scharff, an assistant to the Museum for some time past, has been appointed to the vacant curatorship. Dr. Scharff studied at Edinburgh, where he obtained the degree of Bachelor of Science, also in London under Professor Ray Lankester, and worked in the British Museum under Professor Flower, F.R.S. He has written many papers on zoological subjects, and for some time acted as vice-president of the Conchological Society of Great Britain and Ireland.

NATIONAL CHILDREN'S HOSPITAL, DUBLIN.

A bazaar and fancy fair in aid of the funds of this hospital will be held next week. There is a debt still due on the institution amounting to £1500, and it is confidently expected that a considerable amount will be obtained for a very deserving charity.

SMALL-POX IN DUBLIN.

Three cases of this disease were admitted to hospital during the week ending the 26th ult., being one over the admissions for the preceding week. There are seven cases at present under treatment in hospital, but so far only one death has occurred.

EPIDEMIC OF MEASLES IN BALTIMORE, NEAR SKIBBEREEN.

An epidemic of measles of a very dangerous type has broken out in this place, and numerous deaths have resulted. A peculiarity of the affection is that it attacks adults as well

as children; in the latter it is complicated with congestion of the lungs. Dr. Jennings, medical officer of the district, is using every exertion to prevent intercourse with the infected families, as, should the disease spread to the adjacent town of Skibbereen, the results would be very serious indeed.

The total amount collected for the Jubilee Fund in connexion with the Royal Medical Benevolent Fund Society of Ireland has been £129 8s., which, after payment of the necessary expenses, will be distributed before Christmas.

The opening meeting of the Scientific Association in connexion with the Royal College of Surgeons' Medical School will be held to-morrow (Wednesday) evening in the Albert Hall of the College.

Dr. Ball has resigned the post of medical officer to the South City Dispensary District, Dublin Union. An election for his successor will take place on the 20th inst.

Dr. B. Kennedy has been elected resident medical officer and apothecary, North Dublin Union, at a salary of £200 a year, with furnished residence, &c.

Dublin, Dec. 6th.

PARIS.

(From our Paris Correspondent.)

DIPHTHERIA.

ACCORDING to the researches lately communicated to the Academy of Sciences by Dr. Teissier of Lyons, the author believes that diphtheria is, above all, an infectious malady, the germ of which, being transmitted through the medium of atmospheric dust, is absorbed through the respiratory organs. The dust emanating from manure heaps, collections of rags or of straw, are particularly favourable for such transmission, as they constitute excellent media for the culture of the pathogenic germ. The pigeon and the common fowl seem to be the most active agents for the dissemination of the germs from these different infectious foci. Among the other cases which contribute to favour the receptivity of the germ, cold occupies the first place (79 out of 132), Dr. Teissier, however, remarks that the humidity of the air constitutes, without any doubt, a condition extremely propitious for the multiplication and dissemination of the germs of diphtheria.

CONFINED AIR AND THE DEVELOPMENT OF PHTHISIS.

At the meeting of the Academy of Sciences of last week, Professor Brown-Séquard spoke upon a subject that he had commenced in 1869 to demonstrate—namely, the influence of confined air on the development of pulmonary phthisis. The learned Professor had performed experiments on a number of guinea-pigs, which he divided into two series. In the one series, after having inoculated the animals with tuberculous matter, they were placed in the most favourable conditions as to bedding, alimentation, and aeration. They lived at liberty under a shed opening into a garden, and where the bedding was frequently renewed. Not one of them (numbering more than a hundred) was affected by the inoculation. They manifested no sign of phthisis, and remained perfectly healthy. The second series, however, which were inoculated in the same manner, but which were condemned to live in closed laboratories, where the air was confined; nearly all died from phthisis. After having shown the advantages which would accrue to phthisical patients were they to live as much as possible in the open air, Dr. Brown-Séquard presented an ingenious apparatus which he invented in conjunction with M. d'Arsonval, the object of which is to remove from a room the expired air of phthisical patients. This apparatus is composed of several parts, the essential one of which is bell-shaped. It is placed at the head of the patient's bed and put into communication by the aid of a tube with a chimney, heated by gas, or a candle, or a lamp, so as to cause a draught. The chimney, which communicates equally by a tube with the external air, draws all the air proceeding from the lungs of the patient and expels it to the exterior in such a manner that it does not mix with the atmosphere of the room.

THE CLEANSING OF CARPETS.

One of the most prolific sources of the propagation of infectious or contagious diseases is, as you have more than once pointed out, the house carpet, which can retain the germs of these diseases. But as the carpets must be cleaned, and as the practice of beating them in the open air is considered a public nuisance, M. Bunel, the principal architect of the Prefecture of Police, was charged to devise some means by which this nuisance might be reduced to a minimum, or, if possible, entirely prevented. M. Bunel submitted an apparatus in the form of a cylinder to the Council of Public Hygiene, in which the carpets are placed, and by a rotatory motion the dust is dislodged. The advantages of this invention over the ordinary method had been approved of; but M. Bunel soon discovered that the dust and other particles escaping from the carpets, instead of being burned as he thought they would be, were utilised in industry for filling cushions, and the finer particles were employed for coating paper hangings, which give them their velvety appearance. This highly objectionable practice was soon brought to the notice of the police authorities, and on the advice of the Council of Hygiene it is ordained that the dust and particles beaten out from carpets should be collected in closed apparatus and burned; but those who may wish to utilise them should have them previously disinfected and then submitted to a current of steam under pressure at a temperature above 100° C., or of sulphurous acid.

Paris, Dec. 6th.

THE SANITARY CONDITION OF VENICE.

(From our Special Correspondent.)

THE question whether Venice may fairly be described as a healthy town is an open one. The admiration, that at times degenerates into fanaticism, with which everyone possessing any artistic perception must view such a town as Venice is apt to obliterate the consideration of those sanitary matters on which our existence depends. Then comes an epidemic of cholera coupled with exaggerated apprehension. No place, perhaps, has been so often described as Venice, and yet little or nothing is known concerning its sanitary condition. The studies on this town, whether with pen or pencil, are generally art studies. A dissertation on the soil-pipes, drains, and cesspits of Venice seems almost a sacrilege. It is, however, none the less necessary, particularly when we consider that the average death-rate for the twenty years from 1861 to 1880 amounted to 30·3 per 1000 of the population. This period comprises several years of foreign domination, of political struggles and revolutions, when, of course, sanitary matters were greatly neglected. Now that independence and peace have been enjoyed for some years a marked improvement has taken place. According to a pamphlet now in course of preparation at the Demographical Department of the Venice Municipality, the mean mortality for the years 1883 to 1886 was only 25·8 per 1000. Yet the mortality for 1886, which included 640 deaths from cholera, amounted to 28·2. Again, according to local statistics, the death-rate for 1884 amounted to 24·6 per 1000; whereas, in the official Government report published at Rome, the death-rate for this year is estimated at 28·90, 28·49, or 26·98 per 1000, according to allowances made for floating population. Taking the present year, I find, during the first quarter, that 29·2 deaths per 1000 per annum were recorded, and the proportion during the second quarter of 1887 fell to 21·8 per 1000. Probably the average death-rate at Venice is now 26 or 27 per 1000. Comparing Venice with the nineteen principal towns of Italy, with populations varying from half a million to 58,000 persons, Venice stands in a position about half-way between the worst and the best, though there are but seven towns that have a larger population in the kingdom.

On discussing the question of the death-rate with Dr. Alex. Menzies, an English resident physician at Venice, the fairness of comparing English and Italian death-rates was raised. Basing his observations on many years' experience of Italian practice, Dr. Menzies insisted very forcibly on the insufficient nutriment of the native diet. Even the better class lived in a wretched manner. They were vegetarians, and bad vegetarians, for they did not eat enough of those vegetables that are the best substitute for meat. Polenta of inferior quality, as is so often the case, is not equal to Scotch oatmeal. Consequently they were the ready victims of any outbreak of illness. Nor do the people possess sufficient stamina to resist illness. Quick to take alarm, with loss of courage and insufficient nutriment, the system was not able

to shake off an indisposition which a well-fed Englishman would scarcely feel. Though there is a regular municipal service to inspect all food brought into the town, it is feared, nevertheless, that this is not as fresh as it should be. When the cholera epidemic broke out, some twenty tons of bad food, I was told, had been seized in a day. With similar lack of faith, many persons deny the prevalence of cholera to the extent described. There are a certain number of doctors who are appointed by the municipality to attend on the poor, and their fees amount to about 4s. for each case. When, however, cholera prevails, these doctors receive a fee of £1 for each case,—not for each visit, but for each case. The difference between five francs and twenty-five francs is so great, and the doctors at best are so grievously underpaid, that it is not surprising if, in a country where corruption is not an unknown evil, the public should have suspected that cases were recorded as cholera when the disease was only due to some digestive disturbance, caused probably by bad food. On the other hand, and as opposed to these arguments, it must be borne in mind that the inhabitants of Venice are equally interested, on their side, in making out as good a case as possible for the town, so as not to alarm the foreign visitor, on whose presence and custom they in a great measure depend. It is, therefore, natural that all manner of arguments should be brought forward to lessen the importance of the cholera epidemic. Certainly foreign visitors would not have encountered so grave a risk as many were led to imagine had they gone to Venice when the cholera prevailed. Here, as elsewhere, most of the victims were among the poorer classes—the worst fed and the worst lodged sections of the population. Concerning the food, which is stated to be responsible for many cases of illness erroneously described as cholera, what I saw—not a large quantity—did not seem unfit for consumption. The fried fish shops in the poorer quarters compared very favourably with similar institutions in London. The grease appeared to be of a much better quality than that used in London, and there was a greater variety of fish. In the butchers' shops every piece of meat bore the stamp of the public slaughter-house where it had been inspected; and this is a better system of control than that enforced in England. Visitors may attribute to bad food attacks of intestinal catarrh, which are really due to standing on cold marble floors and to chills caught by going from the heat of the sun into the cool of churches, palaces, or museums.

At Venice, as elsewhere, the high death-rate was attributed to the number of public hospitals and similar institutions, which attract patients from the surrounding provinces. Of course this argument applies also to London, Paris, and other great towns. Nevertheless, it has some weight with respect to Venice; for the proportion of deaths in public institutions for the years 1881-82 amounted to 351 out of 1000 deaths in the town. In 1883 the proportion was 365, and 349 in 1884. On the other hand, in London, during, for instance, the year 1883, the deaths in public institutions amounted to only 205·0 per 1000. This difference, however, may be due not so much to a large influx of patients from the outlying rural districts, as to greater poverty among the mass of the population of Venice itself.

More serious than these questions is the vexed problem of the Venice water supply. In this matter the position of the town is altogether peculiar and exceptional. Wells in Venice are not built so as to collect water from the surrounding soil, but, on the contrary, so as to exclude all such water. Apart from the question of possible contamination, as Venice is built on 114 small islands, divided from one another by 150 canals, all full of salt water, any water derived from the soil would be brackish and undrinkable. A well in Venice consists of an outer well carefully cemented so as to exclude all infiltration. In the centre another smaller well is built. Between the two fine clean sand is introduced. The rain-water collected from the roofs is conducted by pipes to the surface of the sand, and has to filter through till it reaches the bottom of the outer well, and here little holes enable the water to pass into the inner well or channel. In a word, the water supply of Venice consisted of rain water filtered and carefully stored; but in dry seasons this supply would fall short. Then barges were employed to bring water from the river Brenta on the mainland, and the wells thus replenished; now, however, a company has obtained a concession for the water supply of Venice. Iron pipes are placed at the bottom of the Lagoon, and the water of the Seriola canal, which is a derivation of the Brenta, brought to Venice, and thus a constant supply is provided to all subscribers. There are reservoirs containing in all 10,000 cubic metres, and the water, under a pressure of three atmospheres, can be delivered to a height of 20 metres. The charge is 60 centimes per cubic metre; but on a very large quantity a reduction is made. There are also 115 public wells where this water is supplied gratuitously. Thus there is no need to fear that the water supply will run short, and in that sense an improvement has been accomplished. Nevertheless, it would have been much safer to have continued to rely on the old system. It suffices to say, not to mention other sources of contamination, that the new water supply receives all the dejections of the town of Padua, with its 47,000 inhabitants. Loud and angry protests have been made against the introduction of water from such a source. Several practitioners have assured me that typhoid fever has notably increased since the new water supply, though I was unable to obtain any statistics either to confirm or to disprove this assertion. The authorities, on their side, assure me that the canal was watched by troops during the cholera epidemic; this precaution, however, would not prevent the town of Padua draining into the Brenta. The best thing that can be said is that it is proposed to alter the source of the water supply, and the municipal authorities believe this indispensable reform will soon be accomplished. There is, however, a tendency to procrastination, and strong public pressure must be brought to bear on this all-important point.

To account for the presence of typhoid fever, however, one is not limited to the water supply. The domestic arrangements are ingeniously contrived to produce the utmost possible mischief. An opportunity was procured me of visiting several houses where cases of typhoid fever had occurred. In one instance, the father, mother, grandmother, and two children lived in one ground-floor room. The flooring had sunk a little below the level of the street, and there were traces of dampness. In the furthest corner of the room there was a sink and a small marble seat. On lifting up the lid of this seat there was seen below it a square masonry shaft. The rough broken pieces of stone or brick were covered with fæcal matter. There was no closet pan, no pipe, only a plain square masonry shaft, and this in a bedroom and living room occupied by five persons! From the sink a pipe went in to this drain and brought back its foul odours. Down this hole the dejections of the typhoid patient were thrown, without any precautions whatever being taken, and without any attempt being made to disinfect them. Over this open drain hung buckets containing water, and round about was the food of the family. When the buckets are empty, they are taken from within a foot or two of a drain soiled with the dejections of a typhoid patient, and thrown down into the public wells and refilled. During the cholera epidemic, the municipality provided buckets and ropes to the public wells, and appointed guardians to watch and prevent persons contaminating the water by casting down their own buckets and ropes. This excellent precaution is now neglected; in fact, I have not seen it applied at any one well, though, of course, I did not visit all the 115 public wells and fountains of Venice.

In another house, where a better class of working men lived, sharing several rooms, and in nowise suffering from overcrowding, I found exactly the same utter want of proper sanitary accommodation. In the kitchen, by the fire, side by side, stood the sink for washing dirty dishes &c., and a marble seat with a circular hole opening into a brick or stone shaft. No pan, no valve, no pipe; as for traps or syphons, of course they were totally out of the question. The closet seat, if such it may be called, was not even walled off from the rest of the kitchen, and, together with the sink-pipe, poisoned the atmosphere of the room. Here also the water buckets stood or were suspended within a few inches of this fever-breeding drain. On inquiry I was informed this was no exceptional case, and that the arrangements of the other houses were the same. The inhabitants were utterly astounded by my questions and investigations. The idea that such things could in any way affect their health had never dawned upon them. This foulness and neglect on the part of the authorities was all the more lamentable as in other respects the homes of the poor are very superior to the habitations of similar classes in the large towns of England. It was impossible not to admire the cleanliness of the bedding, the order of the rooms, the simple neatness of the furniture, the sobriety of the inhabitants, and the care they took of their home. An

English workman with twice the income could not make half so good a show. That so worthy a population should be allowed to fall victims to a great number of diseases for want of properly constructed waterclosets and waste water pipes is absolutely inexcusable. This is a criticism, however, that does not apply specially to Venice, but also to a number of other Italian towns, and it will be necessary to revert again to the question of domestic drainage in Italy.

In the meanwhile, and so far as the public sewers or drains of Venice are concerned, these afford special advantages. They are very short, and do not communicate one with the other. Houses possessing wells adjoining a canal drain directly into the water. Those situated in the small bye streets drain into a small sewer built under the street. These sewers are constructed below the water level, and are therefore always quite full of canal water. They constitute, in fact, huge syphons. A few houses have cesspools, but this is exceptional. It will be seen, therefore, that the interiors of the houses are not exposed to the ingress of sewer air generated throughout the town. The nuisance is always a local one, and does not come from any distance. The main difficulty arises from the fact that some of the canals are not affected by the tide. The water therefore becomes very foul, and this is still worse with respect to the small water-logged sewers in the bye streets. Some method of flushing these must be contrived; and with a little engineering skill, and the assistance of the flow of the tide in the neighbouring canals, this should not be impossible. The fact also that the water is salt is, of course, a great protection; but even salt water, in time, becomes foul, and measures for its renewal must be taken. If this were done, and a house-to-house visitation instituted for the purpose of destroying all the drain shafts—I cannot call them pipes—such as I have described, Venice would be one of the most favoured towns in Europe. There is no necessity for cesspools or sewers, therefore no need to endure all the dangers of sewer air; but proper closets must be provided for the houses, and in the meanwhile all foul drains should be destroyed. In some houses there are no drains whatsoever—deep vases are employed and emptied straight into the canal. This is infinitely better than a masonry shaft, which retains on its rough sides the greater part of the soil, and thus permanently infects the surrounding atmosphere.

Of course in some of the better houses English waterclosets have been introduced; but I very much question the soundness of the pipes into which they drain, and in any case this only affects a very small part of the population of Venice, though it comprises a large proportion of English visitors. Domestic drainage and the water supply are the two greatest stumbling-blocks to the prosperity of Venice. If the town could be improved in this respect, the number of visitors would be greatly increased and the fears of epidemics disappear. For three years Venice has suffered severely from the absence of its usual visitors, who felt that the town was not safe when cholera was at hand. Indeed, the list of epidemics shows that in 1835 there were 661 cases of cholera and 359 deaths; 3519 cases and 1453 deaths in 1836. In 1837 there were again 344 deaths. Twelve years later, in 1849, the cholera returned to Venice, and there were 6642 cases and 3839 deaths. In 1854 an epidemic commenced, and 86 cases are noted, with 59 deaths, which augmented the following year to 1208 cases and 708 deaths. In 1866 there were 202 cases and 125 deaths, and in 1867 508 cases and 333 deaths. In 1873 some 800 cases and 459 deaths were recorded, and finally we have last year's epidemic. There were also small-pox epidemics in 1870-71, in 1880-81, and in 1884-85. It will be seen, therefore, that measures for the prevention of zymotic diseases are urgently required, and that, in defence of public health and public interests, it is necessary to call attention to these questions.

Venice, Nov., 1887.

EGYPT.

(From our own Correspondent.)

THE SCHOOL OF MEDICINE.

THE Ministry of Public Instruction has recently made some important changes in the management of this school. Instead of nearly all students receiving their medical education gratuitously and living in the school at Government expense, the present scheme provides for 100 paying and 100 non-paying students, and forty holders of annual scholarships. After the present generation of students none will be admitted gratis. The scholarships are given after competitive examination to poor youths, and consist of £25 a year, besides immunity from school fees. This is already a great advance upon the time when, forty years ago, Mahomet Ali Pacha had to fill his schools by bringing in children by force and locking them up as prisoners. Much greater care is being taken in the preliminary education of boys for the eight years before they commence the study of medicine, and it is reasonably hoped that in a few years we shall have a much better educated class of young doctors. These reforms are chiefly due to the activity and intelligence of Yacoub Pacha Artin, the Armenian Under Secretary of State for Education. At the Medical School there are now thirteen native professors, two assistant professors, one Syrian to teach English, a Levantine curator of the museums, and several natives for purposes of minor teaching. Several new laboratories have been constructed, but unfortunately the old dissecting-room has been demolished before the new one has been begun, so that there will be no practical anatomy for this winter. Clinical work in the wards is beginning to be carried out, but it is at present chiefly in the form of bedside lectures. During the last five years ten books have been written in Arabic by the professors, the matter being mostly culled from some well-known French author. The books include Zoology, Inorganic Chemistry, Mineral Chemistry, Medicine, Auscultation and Percussion, Diseases of Children, Materia Medica, Midwifery, Diseases of Pregnant Women and Children, and Legal Medicine. No less than six of these ten volumes bear the name of the director of the School, Issa Pacha Hamdy. A work on Anatomy is now in the press, and contains some very good plates. It is greatly to be regretted that insuperable jealousy prevents the use of Gray's Anatomy, which was translated into Syrian Arabic by the American Mission at Beyrout. Three young Egyptians have lately returned here with the M.D. degree of Paris, and have been given appointments in the Sanitary Department. There are now three medical students at Montpellier and one in Paris, who, like those just mentioned, are being educated at the expense of the Egyptian Government. Students are never sent to London on account of the expense, and it is several years since any were sent to Edinburgh from here.

GOVERNMENT SCHOOLS IN GENERAL.

Twelve schools are now placed formally under medical charge of a native oculist and other medical men. In consequence of their reports it has been determined to close all schools during August and September, it being found that the children suffered most during those months from diarrhœa and the heat of the weather. Gymnasiums and military instructors have also been provided in order to improve both *physique* and *morale* of the children. Until quite lately evening studies were carried on with only one candle for six boys, but lamps have now been provided which give a light equal to twenty candles to every six boys. It is hoped that this, together with other sanitary improvements, may help to diminish the eye disease which is still very rife among the scholars. Among minor details, wooden plank beds with wool mattresses have given way to iron beds and spring mattresses. A more important question is the due filtering of Nile water and attempts to lessen the cases of Bilharzia hæmatobia. Little can be done until the children are taught the elements of hygiene and cease to believe that unfiltered water is more healthy than after it is rendered colourless. The following numbers show a decided improvement in the ophthalmia of the various schools:—

Percentage of diseases.	Digestive canal.	Eye.	Respiratory.	Urinary.	Skin.	Various.
1884	29	38·0	12·0	2·0	2·4	8
1885	25	29·0	8·0	1·8	1·0	9
1886	46	23·7	5·9	3·9	3·0	22

THE LATE VALENTINE BAKER PACHA.

The Egyptian police, and a very large circle of admiring friends here and elsewhere, are now mourning the sudden death of General Baker. As some inaccurate accounts

of his decease have been telegraphed it may be well here to give the correct version. Upon Nov. 5th the General left Cairo for Port Said to meet his daughter, who was arriving from England. For the next four days he suffered from very slight fever, possibly of malarial origin. He had no fever after Nov. 9th, and then spent six days at Suez convalescent. The fever is only mentioned here to show that it had nothing to do with his death. Upon the 16th inst. he steamed up the Canal in a police launch from Suez towards Tel-el-Kebir, and after a quiet day and a light dinner he went to his cabin apparently quite well at 10.30 P.M. At 2 A.M. he called his daughter, complaining of intense pain in the left chest and back, and stating that he had had no sleep on account of the mosquitoes. The pain was of a very oppressive nature, and increased in severity in spite of fomentations, stimulants, liniments, and a small dose of chlorodyne, administered by the ladies present. Pain was also present in the left shoulder and arm, and it was then remembered that the General had complained of this symptom for two days previously. A great sense of faintness, dyspnœa, lividity of face and hands were also noted, and at 5 A.M. death occurred quite suddenly. His sufferings for three hours were very acute, but were borne with uncomplaining fortitude. His ordinary medical attendant was at once telegraphed for from Cairo, and had no difficulty in certifying angina pectoris as the cause of death. The General had had no previous attack of angina, but it was suspected that he had fatty degeneration of the muscular tissue of the heart. During the past two years he had had some sudden attacks of faintness without apparent cause, inability to take rapid exercise on foot or on horseback, and several minor symptoms, which the patient himself thought to be dyspeptic. No valvular disease had ever been discovered, but he had a weak first sound of the heart. His friends, who, like the writer, had witnessed his untiring activity ten years ago during the Russo-Turkish war, had not failed to notice an ever-increasing physical inertia, though his mind retained to the last an able, statesmanlike grasp of every subject submitted to him. He and his family had suffered much while in Egypt. It will be remembered that in the spring of 1884 he was severely wounded at the battle of El Teb, and upon this occasion he remained six hours in the saddle, with a grape-shot weighing four ounces lodged deeply under his right eye. A year later his wife died at Assouan of a relapse during enteric fever, and his elder daughter also succumbed to severe ulceration of the great intestine during convalescence from enteric fever in Cairo. His only remaining child contracted the disease from the same insanitary house, and recovered after a severe attack.

SIMPLE CONTINUED FEVER.

This fever in Cairo has not yet disappeared, but the cases now occurring are of a much milder type, as if at the end of an epidemic. There are two classes of cases—those apparently due to malaria, and well known as sporadic cases every autumn in Egypt, and others associated with a slight erythema of face, fleeting sore-throat, and desquamation of the hands and face. These eruptive cases are very like scarlatina, and are very probably an extremely mild and innocuous variety of dengue.

Cairo, Nov. 21st.

NEW YORK.

(From our own Correspondent.)

CHOLERA IN NEW YORK HARBOUR.

ON Sept. 23rd the ship *Alesia*, from the Italian ports of Palermo and Naples, arrived in the harbour of New York, after a voyage of twelve days. She had on board 560 passengers, and had lost by cholera on the voyage six other passengers. Of those on board, thirty-five were subsequently affected with cholera at quarantine, of whom nineteen died. On arrival the passengers were landed at Hoffman Island, where they were detained under observation, and the sick were sent to Swinburn Island. It is necessary to state that the New York quarantine establishment consists of: (1) The residence of the Health Officer on Staten Island; (2) Hoffman Island, an artificial island, originally constructed for the storage and disinfection of cargo; (3) Swinburn Island, with its hospitals for the cure of the sick, and until recently (4) a floating hospital for yellow fever. This latter vessel has been removed. The passengers of the *Alesia* were first transferred from the vessel to Hoffman Island, which was in a state of wretched dilapidation. Having been partially fitted with two storehouses for goods, it had not been occupied for many years, and had consequently been allowed to fall into decay. The accommodation for passengers was of a most imperfect kind, and it is not surprising that new cases of cholera continued to occur. There was no proper isolation of the sick from the well, any more than there was on shipboard, and the disease finally died out. The passengers were detained, however, for about two months, though the ship was cleansed and allowed to proceed to her destination. Two weeks after the arrival of the *Alesia*, the *Britannia*, of the same line, arrived, and was detained at quarantine, where cases of cholera developed among her passengers, who are at present under observation. No case of cholera has now occurred for upwards of two weeks, and it seems quite certain that the last germs have been destroyed. The arrival of cholera at our port will prove useful, for it has stimulated proper inquiry as to the condition of our quarantine system and its value. The exposure of this country to direct importation of the infection is very great. There are three lines of steamers between the infected Italian ports and this port, which bring thousands of immigrants, who, in general, represent the lowest class of the populations of those cities. Though our quarantine has undoubtedly prevented the immediate landing of immigrants with their infected clothing, and thus saved the country from the threatened invasion, yet the fact has now been demonstrated that the quarantine of this port is altogether unfit for its purpose. Efforts will be immediately taken to have the entire establishment placed in working condition, so that cargo can be rapidly handled, passengers separated and supervised, and the sick promptly treated. The condition of the New York quarantine naturally interests the Western States quite as much as it does New York, for the great mass of immigrants now arrive with railroad tickets in hand, and hence pass on directly to their destination, which is usually some city of the "Far West." It is in western cities, a thousand miles west of New York, where they first unpack their clothing and household goods packed in their Italian homes. Hence it is that the western States manifest such interest in the quarantine of this port.

AMERICAN PUBLIC HEALTH ASSOCIATION.

This body, now one of the most important national associations, has just completed its fifteenth annual session at Memphis, Tennessee. The session was occupied chiefly with questions relating to practical work of the various health boards of the country. The president, Dr. Sternberg, had just returned from Brazil, where he had been investigating the claims of Freire and Valle to the discovery of the germ of yellow fever. He did not indicate the results of his inquiry.

ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council, held on Thursday, the 8th of December, the Minutes of the Council of the 10th of November were read and confirmed.

As recommended by the Museum Committee, the appointment of Pathological Curator was postponed, and the services of Mr. Eve are retained until Midsummer-day next. An additional assistant is to be appointed in the pathological department of the museum to assist in procuring, examining, and preparing pathological specimens, at a salary at the rate of £150 a year; and he will be required to devote to the duties of the office from five to six hours per diem. The three new work-rooms on the fourth floor are to be devoted to pathological investigation by Fellows and Members of the College under the control of the Museum Committee. (This is not intended to include experiments on animals.)

On the report of the Committee of Management, it was agreed that the University of Otago, Dunedin, New Zealand, be recognised as fulfilling the requirements of the Board in regard to professional study for the diplomas of the two Colleges.

The sixth report, dated Nov. 29th, 1887, of the Committee on the Extension of the College premises, was adopted. The committee recommend the Council to authorise an expenditure of £1179 in providing additional accommodation and fittings for the Library.

Mr. Christopher Heath was re-elected a member of the Court of Examiners in Surgery.

The best thanks of the Council were given to Sir James Paget and Sir Joseph Lister for the delivery of the Morton and the Bradshawe Lectures respectively, and they were requested to publish them.

The Secretary reported the receipt from Messrs. Lawrance, Graham, and Long of the portrait by Richmond of the late Mr. Quain, bequeathed by him to the College. The bust of Mr. Quain, by Woolmer, offered by Miss Dickinson, was accepted with thanks by the Council.

A letter of the 23rd ult. from the Lords of the Privy Council, forwarding a copy of the statement relating to the Supplemental Charter prepared by the Association of Fellows, and requesting to be favoured with any remarks thereon which the Council may have to offer was read, and it was referred to the President and Vice-Presidents to report to the Council at an extraordinary meeting of the Council to be held on Thursday, Jan. 5th.

A letter of the 15th ult. from Mr. Wyndham A. Bewes was read, submitting to the Council the draft of a section which it is proposed to introduce into a Bill for the suppression of indecent publications and advertisements, and inquiring whether the same will meet with the support of the Council. The following resolution was passed: "The Council do not feel prepared to express an opinion on the subject of the proposed section."

Letters from a medical officer of the army were read, requesting the support of the Council on behalf of the officers of the Army Medical Department in their endeavour to obtain military rank and status. The following resolution was passed thereon: "That the Council, whilst feeling an interest in the officers of the Army Medical Department, are not prepared to express an opinion on the questions submitted to them."

The following motion, brought forward by Mr. Hutchinson, seconded by Mr. Bryant, was carried: "That it be referred to a committee to consider and report to the Council on the desirability of altering the regulation relating to the procedure in the election of members of the Court of Examiners, in order that the same may be modified so as to secure that no one be elected unless he receive the votes of a majority of the members of the Council present at the meeting."

The following resolution was also passed: "That, in the opinion of the Council of the Royal College of Surgeons, it is most objectionable that Fellows and Members of the College should allow their names to be advertised in connexion with medical or surgical subjects in popular journals."

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members having passed the final examination for the Fellowship on Nov. 24th, 25th, 26th, and 27th, 1887, were at a meeting of the Council, held on Thursday, Dec. 8th, duly admitted Fellows of the College:—

Taylor, H. H., L.R.C.P.Lond., Consumption Hospital, Brompton; date of Membership, July 22nd, 1880.
Waldy, J., L.R.C.P.Lond., Green-pk., Darlington; July 18th, 1882.
Townesend, S. Chapman, Burleigh-st., Strand; Nov. 14th, 1883.
Thomas, D. L.R.C.P.Lond., Cefnbanal, Tregaron, Aberystwith; April 23rd, 1884.
Murray, G. A. Everett, L.R.C.P.Lond., Chelsea-gardens; April 29th, 1884.
Roberts, J. Reid, M.B.Durh., Suez, Egypt; July 28th, 1884.
Cropley, H. L.S.A., The Hospital, Rotherham; Aug. 6th, 1884.
Smith, F. J., M.B.Oxon, West-st., Finsbury-circus; April 26th, 1885.
Shadbolt, Lionel Pierrepont, L.R.C.P.Lond., Beechcroft, Chislehurst; Aug. 5th, 1885.
Hawkins, F. Stanhope, M.B.Oxon, Trinity-sq.; July 26th, 1886.
Middleton, A. Hancock, M.D., Q.U.I., Athgo-park, Shankill, co. Dublin; January 17th, 1887.

Two other candidates passed the examination, but not having attained the legal age (twenty-five) will receive their diplomas at future meetings of the Council. Three were referred for six months and sixteen for one year.

The following gentleman having undergone the necessary examination in Surgery for the diploma, and, having since obtained a medical qualification was at the same meeting admitted a Member of the College:—

Cunningham, J., L.S.A., Rudgrave-place, Egremont, Cheshire.

At a meeting of the Council of the College on Thursday, the 8th inst., the following gentlemen were elected Examiners under the Combined Scheme for the ensuing year:—*First Examination:* Elementary Anatomy—Messrs. Ballance, Bruce Clarke, Arthur Heneman, W. Arbuthnot Lane, and Charles Stonham. Elementary Physiology—Edwin Hurry Fenwick and William Dobinson Halliburton. *Second Examination:* Anatomy—Messrs. W. H. Bennett, Rickman John Godlee, F. Howard Marsh, and Edmund Owen. Physiology—Messrs. Golding-Bird, B. Thompson Lowne, and Jeremiah McCarthy. *Third Examination:* Midwifery—Drs. William Duncan, Walter Spencer Griffith, George Ernest Herman, John Baptiste Potter. *First Fellowship Examination:* Anatomy—Messrs. Wm. Anderson, Davies-Colley, Rickman J. Godlee, Henry Morris, and Edmund Owen. Physiology: Messrs. Golding-Bird, Benjamin Thompson Lowne, Jeremiah McCarthy, and Gerald Francis Yeo.

ROYAL INSTITUTION OF GREAT BRITAIN.—Mr. and Mrs. Victor Horsley, and Mr. George Lindsay Johnson, have been elected Members of the Royal Institution.

THE governors of the Essex and Colchester Hospital have decided to appoint a paid physician to that institution, at a stipend of £200 a year.

MEDICAL MAGISTRATE.—The name of Mr. G. A. Phillips, M.R.C.S., L.S.A., has been placed upon the Commission of the Peace for the borough of Walsall.

THE death is announced of Mr. John Benjamin Dancer, a Manchester optician, who, it is stated, constructed the first thermometer made in England with any pretensions to accuracy.

SCARLATINA is reported to have broken out among the boys of the *Impregnable* training ship to such an extent that orders have been given countermanding the Christmas holidays, and all the boys have been prohibited from leaving the ship.

HOSPITAL SATURDAY.—On Saturday, Dec. 3rd, the annual Hospital Saturday collection was made for the benefit of the Wolverhampton and Staffordshire General Hospital and of the Wolverhampton Eye Infirmary. For the latter the sum of £226 14*s.* 9*d.* was received, and for the former £1526 1*s.* 2*d.*, being an excess of last year's collection of £210.

THE DENTAL HOSPITAL OF LONDON.—The annual dinner of the staff and students of the Dental Hospital and School of Dental Surgery was held on the 3rd inst., Mr. G. Gregson in the chair. Amongst those present were Sir Edwin Saunders, Dr. Julius Pollock, Dr. Pearce Gould, Mr. Morton Smale, Mr. R. Hepburn, Mr. Underwood, and Mr. J. F. Pink (Secretary).

THE SMALL-POX EPIDEMIC AT SHEFFIELD.—During last week forty-two fresh cases of small-pox were removed by the ambulance to the Winter-street Hospital. Thirty-two convalescent patients were also conveyed to Totley. Altogether, during the week, 106 patients, either suffering or convalescent from the disease, were moved to or from the two hospitals in the borough ambulances, under the direction of Dr. Willey.

SANITARY INSPECTORS.—A meeting of the Association of Public Sanitary Inspectors was held on the 3rd inst. in the Westminster Town Hall, under the presidency of Mr. J. H. Alexander, chief sanitary inspector for Shoreditch. It was unanimously resolved to hold the third provincial meeting in Liverpool. Dr. Collingridge, medical officer of health of the Port of London, delivered an address on the Duties of Port Inspectors of Nuisances. A discussion followed.

VACCINATION GRANTS.—Mr. H. T. Woodd, Calstock, Cornwall, and Mr. George Fisher, Shere, Surrey, have been awarded the Government grant for efficient vaccination in their respective districts, the latter for the fifth time.

SMALL-POX IN SPAIN.—For some time past an epidemic of small-pox has been spreading in Spain. Vaccination is not compulsory, and large numbers of the poorer classes in the towns and rural districts have never been vaccinated. In the first twenty days of November, according to official statistics, 200 deaths from the disease have taken place in Madrid alone, which has a population of about half a million. The majority of cases are under treatment in the civil hospital, but about forty cases have occurred among the troops.

BEQUESTS.—The late Miss M'Keller has left £2000 each to the following hospitals:—The London Hospital, St. Thomas's Hospital, St. George's Hospital, the Westminster Hospital, Charing-cross Hospital, St. Mary's Hospital, and the National Hospital for the Paralysed and Epileptic. At a quarterly court of the governors of the Brompton Consumption Hospital on the 24th ult. the following legacies were announced:—General Ramsey, £200; Major Hooper, £500; Miss M'Keller, £1000 (reversionary); Mrs. Cook, £1000; Miss Hore, £250; Mrs. Pownall, £200; and Mrs. Levien, £500 (duty free). The late Mr. James Wishart, of Leith, has bequeathed £300 to the Edinburgh Royal Infirmary and £250 to the Leith Hospital.

THE SURGICAL AID SOCIETY.—The annual meeting of this Society was held at the City Terminus Hotel on Wednesday last, the Lord Mayor presiding. His Lordship, in congratulating the supporters of the Society on its prosperous condition after the completion of a quarter of a century, stated that the average number of patients assisted each week was 142, the total for the year being 7394, as against 6412 in the previous year. Last year 10,400 surgical appliances had been given to the poor, and the total number distributed since 1862 was 689,704. The annual report gave a very encouraging account of the work of the Society.

BRITISH MEDICAL BENEVOLENT FUND.—The monthly meeting of this useful charity was held on the 29th ult., when there were twenty-six applicants for grants; and the balance at the disposal of the committee would have been overdrawn but for the opportune donation of £20 by an old and valued subscriber. The sum of £142 was voted away to fourteen applicants, and two cases were postponed for further inquiries. Two cases merit mention. In one, a paralysed medical man had a wife and six children entirely dependent upon him, and the sum of £13 was voted and ordered to be sent in weekly instalments of 10s., with leave to apply again in six months; and in the other, a grant was made to enable a widow to obtain needful change for a son suffering from phthisis.

PRESENTATIONS.—On Friday, Dec. 2nd, Dr. Bell, senior medical officer of the Bradford Eye and Ear Hospital, was presented with a large and admirable portrait of himself, which had been subscribed for by a number of gentlemen. The Mayor of Bradford, who made the presentation, said that he was exceedingly glad to act as the mouthpiece of those who thus desired to show their appreciation of the Doctor's unstinted services to the hospital for over thirty years. Dr. Bell, in returning thanks, referred to the constant growth of the hospital, which he attributed to the earnestness of the committee and of the staff. He hoped the portrait might remain in the hospital, which had been the scene of the best part of his public work. Sir Jacob Behrens said the committee accepted the portrait with the greatest pleasure.—Dr. R. Lawson Roberts was on the 23rd ult. presented with a silver salver by the workmen of the New British Iron Company's Wynnstay Collieries, Acrefair Ironworks, and Plasynwerm Brickworks, as a token of their regard and appreciation of his services as the medical officer of the works.

VACCINATION IN EASTBOURNE.—The Local Government Board recently called upon the guardians of the Eastbourne Union to explain the delay attending certain vaccination prosecutions. The guardians have, in their reply, referred the cause to the opposition to the compulsory clauses of the Act on the part of the working classes, to the spread of anti-vaccination literature in the shape of leaflets, to illness amongst infants, and to the removal of families from one district to another.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.
Practical Manual of Diseases of Women and Uterine Therapeutics. By H. Macnaughton Jones, M.D., &c. Third Edition. pp. 550, Illustrated.
Proceedings of the West London Medico-Chirurgical Society. Vol. II. Edited for the Council by H. C. Pope and H. P. Dunn. pp. 132.
On Transfusion of Blood and Saline Fluids. By C. E. Jennings, F.R.C.S., M.S., M.B. Third Edition. pp. 133.

BLAKISTON & SON, Philadelphia.
Transactions of the American Surgical Association. Vol. V. Edited by J. Ewing Mears, M.D. pp. 386.

BRAUMULLER, W., Wien.
Jahres-bericht des Wiener Stadtphysikates über seine Amtsthätigkeit. XV. und XVI. S. 1056.

CASSELL & Co., London, Paris, New York, & Melbourne.
Ophthalmic Surgery. By R. B. Carter, F.R.C.S., and W. A. Frost, F.R.C.S. (Clinical Manual). pp. 554, with Chromograph and 91 Engravings.
Vaccination Vindicated; being an Answer to the Leading Anti-vaccinators. By John McVail, M.D., D.Ph.Camb. pp. 176.

CHURCHILL, J. & A., New Burlington-street, London.
Collective Essays on Preventive Medicine. By Wm. Squire, M.D., F.R.C.P.
On Glycosuria. By Wm. Squire, M.D., F.R.C.P.

CLARENDON PRESS, Oxford.
Translations of Foreign Biological Memoirs. I.: Memoirs on the Physiology of Nerve, of Muscle, and of the Electrical Organ. Edited by J. Burdon-Sanderson, M.D., F.R.S. pp. 553.
Annals of Botany. Edited by J. B. Balfour, M.A., M.D.; S. H. Vines, D.Sc., and W. G. Farlow, M.D. Vol. I., No. 2. 7s. 6d.

COHEN & SOHN, Bonn.
Medianschnitt einer Hochschwangeren bei Steisslage des Fötus. Von Prof. W. Waldeyer. Mit 3 Holtzschnitten und einem Atlas von 3 Tafeln.

CORNISH BROTHERS, Birmingham.
Pathology and Treatment of Abortion. By Leslie Phillips, M.D. pp. 113.

GINN & Co., Boston, U.S.A.; W. P. COLLINS, Great Portland-street, London.
Journal of Morphology. Edited by C. O. Whitman, with the co-operation of E. P. Allis, jun. Vol. I. Number 1. pp. 226.

GRIFFIN, C., & Co., Exeter-street, Strand, London.
Foods: their Composition and Analysis. By A. Winter Blyth, M.R.C.S., F.C.S. Third Edition. pp. 640, with numerous tables and illustrations.

GRIFFITH, FARRAN & Co., St. Paul's Churchyard.
The Bombay Materia Medica and their Therapeutics. By Rustomjee Naserwanjee Khory, M.D. Brux. pp. 600—xxxix. 16s.

HART, H., Oxford.
Miscellanea Medico-Chirurgica. Part II. By H. L. Hussey, F.R.C.S. pp. 58.

JAGO, W., Brighton.
The Chemistry of Wheat, Flour, and Bread, and Technology of Breadmaking. By Wm. Jago, F.C.S., F.I.C. pp. 474.

KEGAN PAUL, TRENCH & Co., Paternoster-square.
A Manual of the British Discomycetes, with Descriptions of the Species of Fungi. By Wm. Phillips, F.L.S. pp. 462, with Illustrations.

KENT & Co., Paternoster-row.
Illustrations: a Pictorial Review of Knowledge. Conducted by F. G. Heath. pp. 380, with 400 engravings.

KIMPTON, R., Wardour-street, London.
A Practical Manual of Venereal Diseases, including Disorders of Generation. By M. K. Hargreaves, M.D. pp. 171. 5s.

LIVINGSTONE, E. & S., Edinburgh.
Manual of Materia Medica and Therapeutics. By William Craig, M.D., C.M.Ed., &c. Fifth Edition, revised and enlarged. pp. 469.

LONGMANS, GREEN, & Co., Paternoster-row, London.
Athletics and Football. By Montague Shearman. With a Contribution on Paper-chasing by W. Rye, and an Introduction by Sir R. Webster, Q.C. pp. 410, with Illustrations. 10s. 6d.

MURRAY, JOHN, Albemarle-street.
Too Late for Gordon and Khartoum. By Alex. Macdonald, F.R.G.S. pp. 359, with maps and plans.
Life and Labour, or Characteristics of Men of Industry, Culture and Genius. By S. Smiles, LL.D. pp. 474.
The Life and Letters of Charles Darwin, including an Autobiographical Chapter. Edited by his Son, Francis Darwin. Second Edition. Three Vols. pp. 395—393—418, with portraits.

PIESSE & LUBIN, New Bond-street, London.
Olfactics and the Physical Senses. By C. H. Piesse. pp. 157.

RAMLOT, E., Bruxelles.
Goutte, Gravelle, leur Complications et leur Traitement rationnel. Par le Dr. J. Boichox. pp. 401.

SAMPSON LOW, MARSTON & Co., Fetter-lane, E.C.

Are Epidemics Contagious? By John Parkin, M.D., F.R.C.S. pp. 146.

The Volcanic Origin of Epidemics. Sequel to the above. By John Parkin, M.D., F.R.C.S. pp. 146, with map.

SMITH, ELDER, & Co., Waterloo-place, London.

Transactions of the Pathological Society of London. Vol. XXXVIII. pp. 511, with plates. General Index to the Transactions for Vols. XXVI. to XXXVII. pp. 204.

SWAN SONNENSCHEIN, LOWREY, & Co., Paternoster-square, London.

The Microscope in Theory and Practice. Translated from the German of Profs. Carl Naegeli and Schwendener. pp. 382, with numerous Illustrations.

WASHINGTON GOVERNMENT PRINTING OFFICE.

Index Catalogue of the Library of the Surgeon-General's Office, United States Army. Vol. VIII.: Authors and Subjects—Legier—Medicine. pp. 1078.

WOOLMER, T., Castle-street, E.C.

The Creator, and what we may Know of the Method of Creation. The Fernley Lecture, 1887. By W. H. Dallinger, LL.D., F.R.S. pp. 83. 2s. 6d.

A Contribution to the Sectional Anatomy of Advanced Extra-uterine Gestation; by D. Berry Hart, M.D., and J. D. Carter, F.R.C.S.Ed. (Oliver and Boyd).—Vaucliu and other Verses; by J. C. Grant (E. W. Allen.—The Hospitals of Paris; by J. B. James, M.R.C.S. (Bale and Sons).—Comparison between the Recuperative Bodily Power of Man in a Rude and in a highly Civilised State; by George Harley, M.D., F.R.S. (Harrison and Son).—The American Journal of Psychology; edited by Prof. G. Stanley Hall (Murray, Baltimore).—On Glycosuria and other Renal Signs of Disordered Nutrition with the Treatment of Diabetes; by Wm. Squire, M.D. (Churchills).—Index Medicus, Vol. IX., No. 10.—Mittheilungen aus der Medicinischen Facultät der Kaiserlich-Japanischen Universität; Band I., No. 1 (Tokio).—Auto-centricism; by R. Lewins, M.D.; edited by H. L. Courtney (Stewart, Farringdon-street).—Four Months among the Surgeons of Europe; by H. Senn, M.D., Ph.D.—To what Extent can we Classify Vesical Calculi for Operation? by A. Venderveer, M.D.—The Italian Registers; by Fred. Helmore (Masters, New Bond-street).—Dead, yet Speaketh; by Dr. Saks (Arrowsmith, Bristol).—Experimental Study of the Effects of Puncture of the Heart in cases of Chloroform Narcosis; by B. A. Watson, M.A., M.D. (Philadelphia).—Filarias encontradas no Coraçio Humano Filariose de Wucherer; pelo Dr. P. S. de Magalhaes.—A Complete Series of Sketches in relation to the Petite Culture System and the Working of the Allotments Act, Issued by the Council of the Engineering and Sanitary Association. 1s.—Précis du Cours d'Exploration Clinique et de Diagnostic Médical professé à l'Université de Bruxelles; par le Dr. E. Spehl (1887-88).—Die Historische Entwickelung der Heilmittellehre; von Dr. Oscar Liebreich.—Magazines for December: Good Words, Sunday Magazine, Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper, Scribner's Monthly (Christmas Number).—Wiener Impfgegnerische Schule und die Vaccinationsstatistik; von Dr. J. Körösi (Vieweg und Sohn, Braunschweig).—Some Observations on Headaches in Children and their Relation to Mental Training; by W. H. Day, M.D. (Churchills).

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ABRAHAM, P. S., M.A., M.D.Dub., F.R.C.S.I., B.Sc. Lond., formerly Examiner in Physiology at the Royal College of Surgeons, Ireland, has been appointed Lecturer on Physiology and Histology at the Westminster Hospital Medical School, vice Heneage Gibbes, resigned.

ANNINGSON, BUSHELL, M.A., M.D.Cantab., M.R.C.S., has been re-appointed Medical Officer of Health for the Cambridge Urban Sanitary District.

BANHAM, WILLIAM WILFRED, L.R.C.P. Lond., M.R.C.S., has been appointed House-Surgeon to the Sheffield Public Hospital and Dispensary, vice H. Lockwood, resigned.

BARBER, PERCIVAL ELLISON, B.A.Cantab., L.R.C.P.Lond., M.R.C.S., has been appointed Senior Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary.

BOSTOCK, JOHN, M.R.C.S., L.S.A., has been appointed Medical Officer for the Leake District of the Loughborough Union.

BOTHAMLEY, R. BROUGHTON, M.R.C.S., L.S.A., has been appointed Medical Officer of Health to the Bromley (Kent) Urban Sanitary Authority.

CAMERON, MURDOCH, M.D., has been appointed Obstetric Physician to the Glasgow Maternity Hospital, vice Sloan.

COCKERTON, HERBERT, M.R.C.S., L.S.A., has been appointed House-Surgeon to the Boscombe Infirmary, Bournemouth.

DAKIN, WILLIAM RADFORD, M.D., B.S.Lond., M.R.C.P., has been appointed Obstetric Physician to Out-patients at the Great Northern Central Hospital.

FISHER, GEORGE, M.R.C.S., L.R.C.P.Ed., has been appointed Certifying Surgeon under the Factory Act to the District of Shere, Surrey.

KINGSFORD, R. C., M.R.C.S., L.R.C.P.Lond., has been appointed Junior House-Surgeon to the Bolton Infirmary and Dispensary.

MARTIN, J. W., M.D., M.Ch.Q.U.I., has been appointed Honorary Medical Officer th the Jessop Hospital for Women, Sheffield.

SANDERSON & O'RIORDAN, Messrs., have been appointed Surgeons to Messrs. Bolcklow, Vaughan, and Cauty's Steelworks and Blast Furnaces, South Bank, Loftus-in-Cleveland.

SLOAN, SAMUEL, M.D., has been appointed Consulting Physician to the Glasgow Maternity Hospital.

SNELL, WALTER STANNES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health to the Okehampton Rural Sanitary District.

STACK, JOSEPH G. M. G., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer for the Gosberton District of the Spalding Union.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

ASHTON-UNDER-LYNE DISTRICT INFIRMARY.—House-Surgeon. Salary £80 per annum, with board and residence.

BIRMINGHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Board, residence, and washing.

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST. Resident Clinical Assistants.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E. — Resident Clinical Assistant. Board and lodging, but no salary.

HOSPITAL FOR WOMEN, Soho-square, W. — Two Clinical Assistants in the Out-patient Department. Fee for the course of three months, £5 5s.

KING'S COLLEGE, London.—Professor of Dental Surgery and Surgeon-Dentist to the hospital.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, E.—Junior House-Surgeon. Salary £30 for six months.

POPLAR UNION.—Public Vaccinator for the Bow District.—Medical Officer for the Bow District. Salary £130 per annum, inclusive of all fees, the guardians providing medicines.

ROYAL ALBERT HOSPITAL, Devonport. — Assistant House-Surgeon. Board and lodging in the hospital, but no salary.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, West Strand, W.C.—House-Surgeon.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Physician to the Out-patient Department.

UNIVERSITY OF EDINBURGH.—Additional Examiners in the Practice of Physic, Midwifery, Anatomy, and Chemistry. Salary in each case £75 a year, with an allowance of £10 a year for travelling and other expenses in the case of examiners not resident in Edinburgh or the immediate neighbourhood.

Births, Marriages, and Deaths.

BIRTHS.

BOLTON. — On the 21st ult., at Woodborough-road, Nottingham, the wife of Joseph S. Bolton, M.D.Edin., M.R.C.S.Eng., of a son.

BRAND.—On the 4th inst., at Invery, Driffield, East Yorks, the wife of Dr. Brand, of a daughter.

CARR.—On the 27th ult., at Devizes, Wilts, the wife of A. A. Carr, M.R.C.S., of a daughter.

JAKINS—On Sunday, the 4th inst., at 9, Osnaburgh-street, Regent's-park, the wife of Percy Jakins, M.R.C.S., of a son.

SAUL.—On the 29th ult., at Bedford-square, W.C., the wife of Wm. Saul, M.D., of a daughter.

WATSON.—On the 4th inst., at Wood-green, N., the wife of Solomon Geo. Watson, M.R.C.S., of a daughter.

MARRIAGES.

COGAN—McVEAGH.—On the 1st inst., at St. Osburg's Church, Coventry, Surgeon-Major Thomas Sillery Cogan, Army Medical Staff, to Edith, youngest daughter of Dr. McVeagh, J.P., of The Quadrant, Coventry.

HOBBES—SCOTT.—On the 3rd inst., at St. Lawrence's, Alvechurch, C. E. Hobbes, L.R.C.P., M.R.C.S., L.S.A., to Marian, widow of the late A. C. Scott, of Weston-on-Avon, and daughter of the late Wm. Boulton, Esq., of Bordesley Hall, Worcestershire.

SHEPERD—SODEN.—On the 26th ult., at St. Paul's Cathedral, Calcutta, by the Rev. Arthur Kitchen, Albert Wilberforce Sheperd, L.R.C.S.I., L. & L.M.K.Q.C.P.I., M.C.P. & S.Man., Medical Officer, Disot Circle, Moriani Jorhat, Assam, India, to Elizabeth W. (Dillie), eldest daughter of C. J. Soden, Esq., H.M.C.S., G.P.O., of Dublin.

DEATHS.

FRENCH. — On the 4th inst., at Cunningham-place, N.W., John George French, F.R.C.S., formerly of Great Marlborough-street, aged 83.

HAWKINS.—On the 4th inst., at Woburn, Bedfordshire, Benjamin Lawrence Hawkins, L.R.C.P., M.R.C.S., late Army Medical Service, aged 57.

MARTIN.—On the 29th ult., at Melville-street, Edinburgh, M. J. Martin, M.D., late of Singapore.

PARKER.—On the 1st inst., at Kirkdale-road, Liverpool, Edward Parker, F.R.C.S.Ed., aged 68.

SMART.—On the 2nd inst., at The Firs, Harlesden, N.W., after a short illness, Sir William Richard Edwin Smart, K.C.B., K.L.H., M.D., Inspector-General (retired), R.N., Honorary Physician to the Queen, &c., aged 70.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, December 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Mr. H. H. Statham: The Elements of Architectural Design. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. B. Hurry Fenwick: The Reflex Inhibitory Action of Cocaine.—Dr. B. W. Richardson: Acute Pulmonary Paresis.

Tuesday, December 13.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. W. Arbuthnot Lane: The Factors that Determine the Hypertrophy of the Skull in Mollities Ossium, Osteitis Deformans, Rickets, and Hereditary Syphilis.—Mr. J. Bland Sutton: A case of Neurotomy of the Third Division of the Fifth Nerve at the Foramen Ovale.

Wednesday, December 14.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.

EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. E. Klein: Some of the Infectious Diseases Common to Man and the Lower Animals.

HUNTERIAN SOCIETY.—8 P.M. Dr. Herman: On the Early Treatment of Extra-uterine Gestation.

HOSPITALS ASSOCIATION.—8 P.M. Dr. J. C. Steele: On the Registration of Nurses.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. A. D. Michael: A New Medium.—Mr. T. B. Rosseter: Generative Organs of Ostracoda.—Mr. W. M. Maskell: On the Genus Micrasterias.

SOCIETY OF ARTS.—8 P.M. Sir Philip Magnus: Commercial Education.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M.—Specimens will be shown by Dr. Bedford Fenwick and Dr. Granville Bantock. Dr. Bedford Fenwick: On the Use of Bloodletting in Gynæcological Practice.—Dr. W. Chapman Grigg: Puerperal Convulsions, with Complete Blindness, lasting for several days.—Dr. Jas. H. Aveling: On the Diagnosis and Electrical Treatment of Early Extra-uterine Gestation.

Thursday, December 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

THE PARKES MUSEUM OF HYGIENE.—5 P.M. Mr. Shirley F. Murphy: Scarlet Fever.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Special Meeting. Professor Crookshank: Report of Investigation on a Disease of Cows, and its Relations to Scarlatina in Man.

Friday, December 16.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Mr. A. Wynter Blyth: The Contagion of Cancer. 8.30 P.M. Mr. G. Bischof: Extension of Time of Culture in Dr. Koch's Bacteriological Water Test by Partial Sterilisation, with Special Reference to the Metropolitan Water Supply.

Saturday, December 17.

MIDDLESEX HOSPITAL.—Operatiops, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, December 8th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Dec. 2	30·40	W.	48	46	65	52	42	...	Overcast
,, 3	30·21	W.	46	44	...	50	44	...	Overcast
,, 4	29·93	S.	47	44	...	47	42	...	Cloudy
,, 5	30·01	N.	39	37	52	44	37	·15	Cloudy
,, 6	29·62	S.W.	42	39	51	45	38	...	Overcast
,, 7	29·67	W.	36	34	53	41	32	·03	Fine
,, 8	29·78	S.W.	39	39	...	...	33	·03	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

"INQUEST EXTRAORDINARY."

To the Editors of THE LANCET.

SIRS,—Will you kindly allow me to give a short history of the facts in connexion with the post-mortem on the murdered body of Mr. Gold, in order to correct a slight inaccuracy in Mr. Thomas Bond's letter to you appearing in last week's LANCET, and to show that there is a basis of truth in Mr. Coroner Baxter's statement that "the medical men were unable to discover the aperture of entry of the bullet fired into Mr. Gold's body by the murderer Lefroy."

Mr. Gold's body was found in Balcombe Tunnel, and removed to the coach-house at the inn adjoining Balcombe station. Dr. Thomas Byass of Cuckfield saw the body, and was ordered to make the post-mortem examination. In this he was assisted by his son. In his evidence at the inquest, in answer to a question by the coroner, he stated that he could not find any bullet wound in the body. My evidence relating to Lefroy, his reception and treatment at the Brighton Hospital, was next taken, and the coroner then asked me to make an examination of Mr. Gold's body, with a view of finding a gunshot wound. I did so, and Dr. Byass was present at the examination, which was made in the coach-house before mentioned, with closed doors, and a policeman outside to keep the yokels away. The face and body were black with smoke, and much bruised and cut about. After considerable trouble, I found a very small, pinhole wound, a little above the angle of the right jaw. Dirt had settled round the roots of the closely-shaven hairs, so that it was impossible to make out any specks of powder there might be. Dr. Byass did not agree with me as to the causation of the wound, so I cut out a piece of the flesh surrounding the hole and took it away with me. Returning to the inquest room, I stated to the coroner that I had discovered a wound which I thought had been caused by the passage of a bullet. Dr. Byass stated that he did not agree with this opinion. The coroner thereupon asked me to have the skin carefully examined, and, having done so at the hospital the same evening, I informed him by letter that there was no doubt that the wound was gunshot. Next day I took the piece of skin to Scotland-yard, where it was seen by Mr. Bond, who also pronounced the wound as being gunshot. Next day the third examination of Mr. Gold's body was made by Mr. Bond, and I was present and assisted at his request. As he says in his letter to you, the bullet was found lying upon the body of the second cervical vertebra.

Apologising for the length of this communication,

I am, Sirs, yours faithfully,

Liverpool, Dec. 5th, 1887. B. HALL, M.B. Lond.

Dr. Joseph O'Connor.—Relief for the skin irritation in jaundice may usually be obtained by the free use of alkaline lotions, or lotions of carbolic acid, benzoic acid, or borax.

Mr. John J. Weaver.—Raynaud (Maurice): De l'Asphyxie Locale, et de la Gangrene Symétrique des Extrémités (Baillière et Fils, Paris, 1862).

AN APPEAL TO THE PROFESSION ON BEHALF OF H. O. BAYFIELD, L.R.C.P.ED., L.F.P.S.G.

To the Editors of THE LANCET.

SIRS,—On Feb. 26th, 1886, an attempt was made to poison Mr. Bayfield's wife's mother, at that time resident in his house, situated at Lavender-hill, the poison (laudanum) being found in some tea which had just been made. The police were called in, and, after exhaustively questioning the various members of the household, decided of their own action to take the parlour-maid into custody. It was Mr. Bayfield's opinion that they had arrested the wrong servant, and so strongly did he feel this that he not only refused to sign the charge-sheet and to prosecute, but actually instructed a solicitor to watch the case on behalf of the accused. The magistrate, however, sent the case for trial, and the Treasury took up the prosecution; but when the matter came before the Grand Jury the Bill was thrown out. Shortly afterwards the cook confessed that it was she who had poisoned the tea, with laudanum taken from Mr. Bayfield's surgery, her object being to injure her fellow servant. She was tried, and sentenced to three months' imprisonment.

Now comes the point which I am anxious more particularly to bring before your readers. The arrest of the girl originally charged was the spontaneous action of the police, and Mr. Bayfield had nothing to do with it. In spite of this, however, a firm of solicitors took up the girl's case, and brought an action against Mr. Bayfield for £200 damages for false imprisonment. The Treasury declined to act in the matter; so Mr. Bayfield was left to fight the battle alone. The case came on for trial before Mr. Justice Matthew on Nov. 14th, and the jury without leaving the box found a verdict in Mr. Bayfield's favour. Then came in the old story, and the plaintiff having no means, Mr. Bayfield, although victorious, was left to pay his own costs, which amount to £106 on his solicitor's bill alone, to say nothing of the further heavy incidental expenses. Nor is this all; for the sympathy with the girl amongst her own class, who are unable to draw correct inferences from facts, very injuriously affects Mr. Bayfield's position amongst his poorer patients in this locality.

Is not this a case in which the profession may very fairly be asked to assist? Any medical man who dispenses his own medicines might find himself in a similar position at any moment; and a subscription in aid of the costs incurred by Mr. Bayfield in defending himself would have something more than a merely pecuniary value—coming to him as an expression of sympathy from his own profession, it would give him valuable moral support.

Subscriptions will be received by Ed. Bellamy, F.R.C.S., 17, Wimpole-street; R. F. Fraser, L.K.Q.C.P., &c., Lavender-hill; G. Tandy, L.R.C.P.Ed., 43, Cedars-road, Clapham; Joseph Sutcliffe, L.R.C.P.Ed., 641, Wandsworth-road; Fredk. Hunter, L.R.C.P., Haycroft House, Lavender-hill.

The following subscriptions have been received:—John Williams, M.D., £2 2s.; Ed. Bellamy, F.R.C.S., £2 2s.; Henry James, F.R.C.S., £3 3s.

I am, Sirs, yours faithfully,

HENRY JAMES, F.R.C.S.

31, Sisters'-avenue, Clapham-common, S.W., Dec. 5th, 1887.

Dr. McCall (Morecambe).—The members of the Commission were Sir H. Roscoe, Dr. Lauder Brunton, Dr. Burdon Sanderson, Sir James Paget, Dr. Quain, Mr. George Fleming, and Mr. Victor Horsley (secretary).

Mr. Wm. G. Loveridge will find an article on the subject of his question in our Students' Number, published on Sept. 3rd last.

Dr. J. F. Brice.—It is possible that the remedy acts as our correspondent suggests.

"ETHER IN MIDWIFERY PRACTICE."

To the Editors of THE LANCET.

SIRS,—Under the above heading Dr. S. Gross speaks of the good results derived from subcutaneous injections of ether in (I presume) asphyxia neonatorum. I would like to call his attention to an article entitled "A Few Remarks upon Therapeutics," written by me to the *New York Medical Journal*, Aug. 21st, 1886, and which was extensively quoted by medical journals in this country, and an abstract of which, I understand, appeared in Braithwaite's Retrospect. In a division, "The Inhalation of Ether in Non-expansion of Lung, due to adhesions of pleural surfaces, occurring after pleurisy with purulent effusion, in apneumatosis of children, and asphyxia neonatorum," he will find the following recommendations:—"I can also recommend the use of ether in the asphyxia of newly born infants. It will sometimes succeed when artificial respiration fails. A few drops may be placed upon a piece of absorbent cotton and held to the nostrils. A better method is, after the nares have been cleansed of mucus, &c., to insinuate into either nostril a camel-hair brush previously dipped in ether, and, by titillating its mucous membrane, we, in addition, summon to our assistance the benefit of reflex action."

I am, Sirs, yours faithfully,

Wilkes Barre, Pa., Nov. 22nd, 1887. J. HARRIS JONES, L.R.C.P., &c.

VOLUNTARY BOARDERS IN ENGLISH ASYLUMS FOR THE INSANE.

To the Editors of THE LANCET.

SIRS,—Can any of your readers inform the writer if there exists in England any asylum, lunatic hospital, or licensed house in which a person wishing to do so may legally become a voluntary boarder, as in Scotland, with or without the consent of the Commissioners in Lunacy, and without having been at some previous time under certificate of insanity?

I am, Sirs, your obedient servant,

Dec. 5th, 1887. QUAERENS.

"ROUGH-AND-READY MEDICAMENTS."

To the Editors of THE LANCET.

SIRS,—Adverting to my former contributions on this point, I beg to submit a few more characteristic episodes of this kind, and simply intimating that I will add in connexion with them such explanatory matter only as will suffice for their better elucidation. I will leave them to speak for themselves. They exhibit strong contrasts, from a humanitarian and physiological point of view, with our own more modern as well as more merciful procedures, and they further serve, as I think, to point the moral, even though they do not adorn the tale, of our present therapeutic art and its achievements.

1. Describing the celebrated Cardan's visit to the Bishop of St. Andrew's (Cardinal Beaton?), Randolph, the English Ambassador at the Court of Scotland says ("The History of Scotland," by P. Fraser Tytler, vol. iii., p. 357) that "he [Cardan] practised upon him divers foreign inventions. He hung him certain hours in the day by the heels to cause him to avoid at the mouth what the other ways nature could not expel; he fed him many days with young whelps; he used him sometimes with extreme heats, and as many days with extreme cold."

2. Sir Astley Cooper is reponsible for this story. "A person in this metropolis happened," he says ("Lectures on Surgery," Lond., 1833, p. 73), "to have bow shins. It was a part of his duties to teach ladies to draw and paint, and in the prosecution of this branch of his profession he found his bow shins, as he himself declared to me, a very great evil. He felt that his merits were less fairly appreciated and his instructions less kindly received by reason of the convexity of his shins. He was persuaded, in short, that his bow shins stood between him and his preferment. Under this impression he went to a very noted person in this town, and, showing him his shins, said to him, 'Pray, sir, do you think you can make my legs straight?' 'Sir,' said the doctor, 'I think I can, if you will take a lodging in my neighbourhood. I think I can scrape down your shins and make them as straight as any man's.' A lodging was taken, the father of the patient assisted in the operations, and all three of them—the father, the son, and the doctor—took a turn in scraping down the convex shins. A great deal of rasping was required. An incision of very considerable extent was made in the shin, the integument was turned aside, and an instrument ..... called a rongee was employed to scrape the shin bone..... At last the shell of the bone became so thin, that the doctor said they must proceed no further with that leg. The other leg was then rasped in a similar manner, and thus large wounds were produced in both of the shin bones. The surfaces granulated very kindly, and very little exfoliation of the bones took place, but unluckily the granulations would form bone, so that up-jumped the bones of the shin again. The doctor, however, was not to be defeated, and accordingly put a layer of arsenic over the whole surface. It was in consequence of the effects of this application that I saw the patient. The arsenic was absorbed into the system, and he became paralytic in his arms and lower extremities. A great number of exfoliations took place in his legs, and he showed me a large box of them. I sent him to Bath, where he stayed for some time, and got rid of his paralysis."

3. "The Society Islanders had," says Sir J. Lubbock ("Pre-Historic Times," 1st ed., p. 384), "no knowledge of medicine as distinct from witchcraft. ..... When the brain is injured as well as the bone, they have opened the skull, taken out the injured portion of the brain, and, having a pig ready, have killed it, taken out the pig's brains, put them in the man's head, and covered them up." The result does not transpire, but the "treatment" is as simple as it is suggestive, and it is a pity that the missionary, Mr. Ellis, on whose authority he bases it, does not himself testify from personal knowledge to either its soundness or certainty.

I am, Sirs, your obedient servant,

Auriol-road, W., Nov. 28th, 1887. W. CUBRAN.

L.K. & Q.C.P.I.—The only consolation we can see in the charges of the unqualified assistant is that they are likely to convey to the poor the best idea of the value of the services offered. As to the questions of etiquette we congratulate our correspondent on his conduct. It is disappointing to find generosity and professional kindness not reciprocated. But that in no degree diminishes the value of such sentiments nor of the conduct which they inspire.

W. Parker, M.B., C.M.—We fear there are no efficient legal means for enabling the removal of such a sign as our correspondent describes.

Horrens.—An article on the subject will be found in THE LANCET of Nov. 20th, 1886.

TREATMENT OF ECZEMA AND PSORIASIS.

To the Editors of THE LANCET.

SIRS,—Having received over 100 letters and post-cards from medical men and patients asking all sorts of questions as to the management and treatment of eczema and psoriasis, kindly give me space to say that I cannot reply to them, that I never prescribe for anyone by post, and that the naphthaline tincture and lotion can be had of Messrs. Schütte and Co., Widmore Quinine Works, Bromley, Kent. The former I have found the best application for very chronic patches of both eczema and psoriasis; I paint it on. The latter I use as a wash in less obstinate cases. I also use Messrs. Schütte and Co.'s dermato-therapeutic quinine lotion in chronic eczema. I have found it by far the best thing I have ever met with for allaying itching and keeping the skin soft.

I am, Sirs, yours faithfully,

Harrogate, Dec. 8th, 1887. A. S. MYRTLE, M.D.

A CENTENARIAN.

To the Editors of THE LANCET.

SIRS,—Through the kindness of a friend I am able to present to the readers of THE LANCET more than a match in longevity to that of Miss Charlotte Pigot, whose history is given by Mr. Ledgard, of Kirkby, Lonsdale, in your impression of Nov. 5th.

The centenarian whom I wish to mention is Mrs. Sarah Markham, at present living at Roxby, a small village about a mile from Winterton, in North Lincolnshire. Mrs. Markham was born on Royal Oak day in 1785. She was one of nine children, and when eleven years of age went to service at 14, Old Bond-street, London, where she stayed until she married at the age of twenty-four years. She was left a widow and a mother at the end of nine months, her husband having died from lock-jaw. After her husband's death Mrs. Markham went as foster-mother to a baby who is now eighty years of age, Mrs. Bridgeman Simpson, of Babworth Hall, Notts. Before Mrs. Markham's second marriage she was a nurse in the Sheridan family, and during her service there she frequently saw George IV., who was a constant visitor at the house. She married a second time when she was thirty years of age, and then with her husband settled in Roxby, where she has lived ever since; he, who was seven years her junior, died fifteen years ago. Mrs. Markham had seven children by the second marriage, and has a great many grandchildren and great-grandchildren. She attends church and Holy Communion regularly, can walk very well without the aid of a stick, but does not extend her walks much further than the church, which is not very far from her house. The old lady is only slightly deaf; seven years ago one of her eyes was injured by a stone which was thrown at it, but with the other she can see to read without the aid of spectacles. She is quite upright in figure, and does not look more than eighty years of age, and has a very pleasant face. My informant tells me that she called upon the old lady on Nov. 19th, and was much struck with her wonderful memory. The old lady would go upstairs to fetch a quilt to show her visitor that Lady Francis Simpson had given her on her hundredth birthday. She said she had got up before 7 o'clock that morning, and had blackleaded both her grates, and had washed the floors and done all the housework herself. She lives alone in her cottage, but a grandson sleeps in the house at night. She has always been very abstemious, and has never smoked. Mr. Biwes of Roxby allows her £15 a year, and other friends are very kind to her. She is wonderfully active and self-reliant. A lady a few weeks ago went to Roxby Church, and walking home with the old lady offered her her arm, which, however, the other declined, and walked on in a most independent manner. When she arrived home she unlocked the door, struck a match, and lit the lamp. When her visitor was leaving she told her to be careful and not fall, as the garden path was rather rough, and in order to ensure the visitor's safety she carried the lamp as far as the garden gate to light her down the village. There is an old lady living near who is about eighty-five years of age, and whom Mrs. Markham treats as a baby, and escorts to and from church. On one occasion, when the younger lady had left her spectacles behind her in the church, the elder said to her, "Wait a moment, I will run back and fetch them for you." On a recent occasion, when a lady and gentleman called upon Mrs. Markham, she apologised to them for not showing them into a room where there was a fire, for she had "got the dressmaker in the house.'—Yours truly,

Lincoln, Nov. 29th, 1887. WILLIAM O'NEILL, M.D.

Medicus should inform the person who is acting so remarkably that unless he desists immediately his conduct will be reported to the College from which he holds his diploma, or to the Medical Council. He should also call upon his friend who introduced the *locum tenens* to remonstrate.

Private Practitioner.—We would recommend our correspondent to write to the medical officer of health, and inform him that he will be happy to give information on any point he desires for the purpose of facilitating the performance of his public duties.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Buzzard, London; Mr. Hulke, London; Dr. Handford; Messrs. P. Harris and Co., Birmingham; Dr. N. Thursfield, Shrewsbury; Mr. Bernard Pitts, London; Dr. Hughes, Flint; Dr. Groom, Wisbech; Mr. Walter Edmunds, London; Dr. A. W. Harding, Baling; Mr. F. B. Jessett, London; Sir H. Holland, London; Dr. Padley, Swansea; Mr. R. East, London; Mr. Z. Moon, Loughborough; Mr. B. Carlile, London; Mr. S. Snell, Sheffield; Dr. Mackay, Hornby; Mr. J. H. Jones, Wilkes Barre; Mr. T. F. Raven, Broadstairs; Mr. Roper, London; Mr. Henry James; Mr. C. R. Owen, Rushden; Dr. Brewis, Leeds; Mr. Lawson Tait, Birmingham; Mr. R. T. Bowden, Chatham; Messrs. Carlyle and Co., Liverpool; Dr. E. F. Neve, Kashmir; Messrs. Rowntree and Co., York; Dr. Shearer, Paisley; Dr. Macleod, Dundee; Dr. Garrett-Horder, Cardiff; Mr. Davidson, Hipperholme; Mr. Lang, Broughton Ferry; Mr. Shelswell, Mitcham; Dr. Kilner, London; Dr. Radcliffe Crocker, London; Mr. Frowde, Barrow-in-Furness; Messrs. Trübner and Co., London; Dr. Boreham, Torquay; Mr. Burke; Dr. T. More Madden, Dublin; Mr. Stempel, London; Mrs. Taylor; Messrs. Stern and Co., London; Mr. Rankin, Dumbarton; Mr. Anderson; Messrs. Fritz and Co., Liverpool; Mr. T. P. Devlin, Carlisle; Messrs. Schacht and Co., Clifton; Dr. Brice, Oxton; Dr. Moynan, Bgham; Messrs. White and Son, Bradford; Mr. St. Dalmas, Leicester; Messrs. Wilson and Son, London; Mr. O. Pemberton, Birmingham; Messrs. Street and Co., London; Mr. Moxham, Stroud; Mr. Robertson; Dr. B. Hall, Tue Brook; Dr. Gogarty, Canterbury; Mr. Gregnon, London; Mr. Lloyd Jones, Exeter; Mr. Birdwood, London; Dr. Larking; Dr. Dale, King's Lynn; Mr. Scott, Oldham; Mr. Holdman, Reigate; Messrs. Clark and Co., London; Mr. J. Clay, Birmingham; Dr. J. Körösi, Buda-Pesth; Dr. W. B. Tomson, Luton; Dr. Maccall, Morecambe; Dr. W. H. Day, London; Mr. Celene, Dulwich; Mr. Godfrey, Northampton; Mr. Shute, Greenwich; Mr. Roberts, Ainsworth; Mr. Thomas, Llanuwchllyn; Mr. Fuge, Taunton; Mr. Bond, Leicester; Mr. Malland, Blackgang; Mr. Frost, London; Mr. Revira, London; Dr. Sheenan, Lavingham; Mr. Sodon, Dublin; Mr. Beason, Mentone; Mr. Lord, Devonport; Mr. Eminson, Haxey; Mr. Kelly, Nottingham; Mr. T. Cooke, London; Mr. Mann, Bradford; Dr. Beer, Vienna; Mr. Gurner, London; Mr. Nicholls, Hartest; Mr. Campbell, London; Mr. Squire, London; Mr. Taylor, Brosley; Mr. Bonner, Baling; Dr. Kirkland, Horsham; Mr. Groves, Dorchester; Dr. Coghill; Dr. Haslam; Epsom College; J. O'C., M.D.; F. Z. S.; Quærens; G. H., Baling; Private Practitioner; Matron; Tenax; E. B.; H. B., Lewisham; A Young Surgeon; Matron, Preston; M.B.; Nullus; B. H.; Audi Alteram Partem; Medicus; B. H.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Taylor, East Dereham; Mr. Bagaley, Birmingham; Messrs. Morson and Co., Newcastle-on-Tyne; Mr. Guest, Darlington; Mr. Halt, Stoke Newington; Mr. Westwood, Stratton; Mr. Wilson; Messrs. Smith and Co., Manchester; Mr. Stenhouse, Glasgow; Messrs. Burgoyne and Co., London; Mr. Wormald, Manchester; Mr. Blythe, Salisbury; Mr. Madam, Oxford; Mr. Webb, Middlesbro'; Mr. Birchall, Liverpool; Dr. Bolton, Nottingham; Mr. Briggs, Cambridge; Miss Jones, Rhyl; Mr. Hughes, Flint; Dr. Batho, Pontefract; Dr. Taylor, Newcastleton; Dr. Tonks, Willenhall; Dr. Popham; Mr. Nutman, Great Yarmouth; Dr. Brand, Driffield; Mr. Saunders, London; Mr. Watt, London; Mr. Hine; Mr. Hawksworth, Welshpool; Messrs. Cornish, Manchester; Mr. Peirce, Guildford; Mr. Dyer, London; Mr. Brewer, Barnstaple; Mr. Heywood, Manchester; Mr. Appleton; Mr. Oswald, Clapham; Mr. Hill; N. Z., Brockley; M.B., Carlisle; Permanency; M.B., Windsor; Heath; H. T., Forest Gate; Sporting; Deaconess Townson, Chester; Scapula; Alpha; Kappa; Alma; Medicus, Mile-end; Medicus, Kingstown; T., Bath; Surgeon; B. S.; Medicus, Peckham; M. W., Barnsley; Thames; Principal, Southport; Mr. M., Cornwall; J. N.; H. B.; Clare; Beta.

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